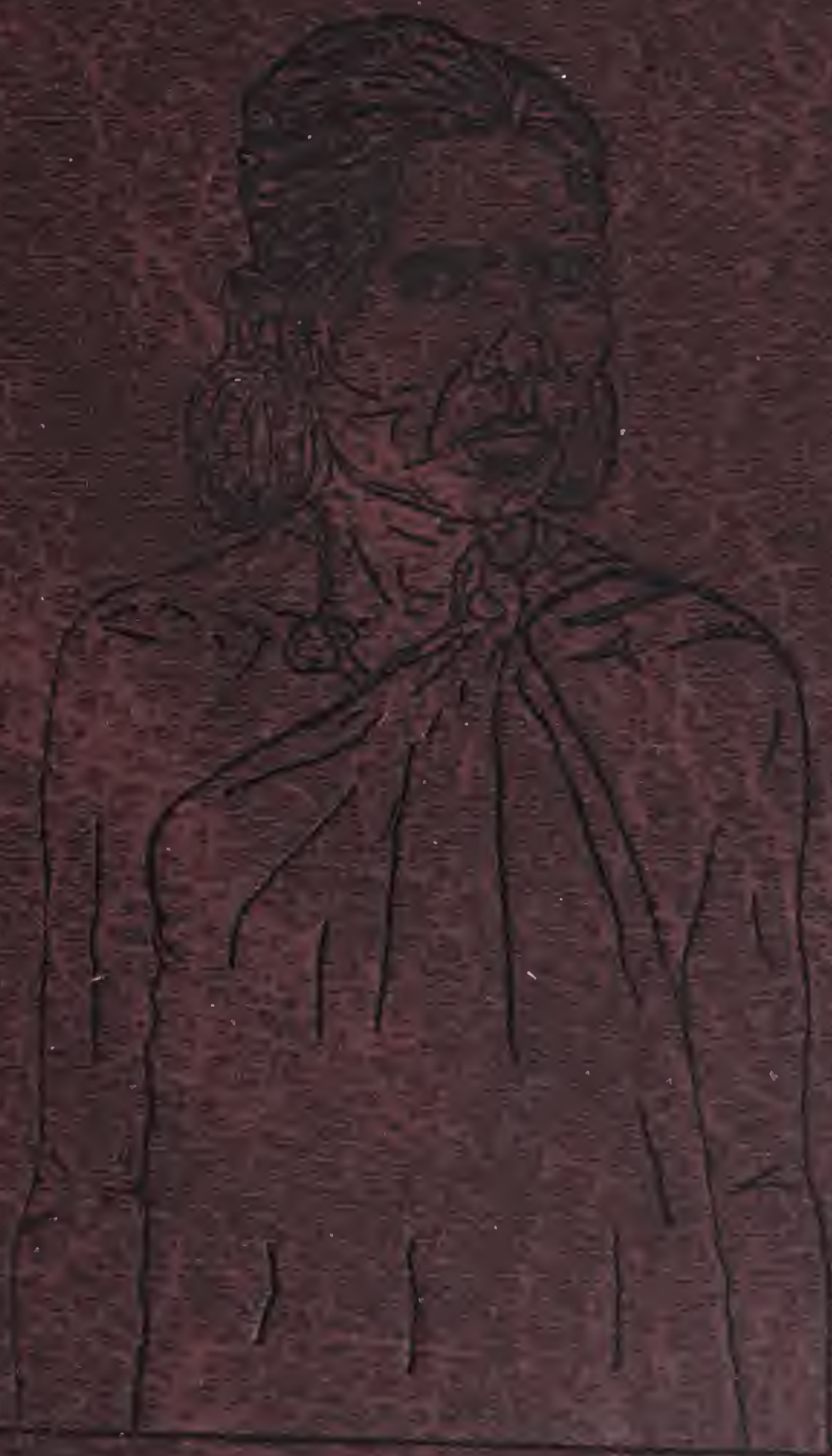


MADRAS GOVERNMENT MUSEUM
BULLETIN, VOL. II, NO. 3

KĀDIRS OF ANAIMARAIS
MAIAIĀLIS OF SHEVAROYS
THE DRAVIDIAN HEAD; DRAVIDIAN PROBLEM
E. THURSTON



KADIR WOMAN

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ANTHROPOLOGY

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Syllabus of Demonstrations on Anthropology;
The Dravidian Head; The Dravidian Problem.

With Seven Plates.

BY

EDGAR THURSTON,

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ÉTRANGER, SOCIÉTÉ D'ANTHROPOLOGIE DE PARIS.

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ANTHROPOLOGY.

KADIRS OF THE ĀNAIMALAIS.

IN striking and pleasant contrast to the suspicious Malaiālis, who are dealt with in the next chapter, were the friendly Kādirs, who inhabit the Ānaimalai hills (= elephant hills) and the mountain range which extends thence southward into Travancore. This study was undertaken with a view to acquiring an addition to our existing fragmentary knowledge of the short, broad-nosed tribes of Southern India, round whom, as the living remnant of an ancient, and once more numerous race, much interest will be found to centre when, if ever, these stray notulæ are amalgamated in book form.

A night journey by rail to Coimbatore, and forty miles thence by road at the mercy of a typically obstinate jutka pony, which landed me in a dense patch of prickly-pear (*Opuntia Dillenii*), brought me to the foot of the hills at Sēthumadai, where I came under the kindly hospitality of the Conservator of Forests, Mr. H. A. Gass, and the District Forest Officer, Mr. F. A. Lodge. To the former, who has had long experience of the Kādirs, I am indebted for much information on forest and tribal matters, gathered during a fortnight of camp life at Mount Stuart, situated 2,350 feet above sea-level in the midst of a dense bamboo jungle, and playfully named after Sir Mountstuart Grant-Duff, who visited the spot during his Madras quinquennium.

At Sēthumadai I made the acquaintance of my first Kādir, not dressed, as I hoped, in a primitive garb of leaves, but wearing a coloured turban and the cast-off red coat of a British soldier, who had come down the hill to carry up my camp bath, which acted as an excellent umbrella, to protect him from the driving showers. Very glad was I of his services in helping to convey my clothed, and consequently helpless self, across the mountain torrents

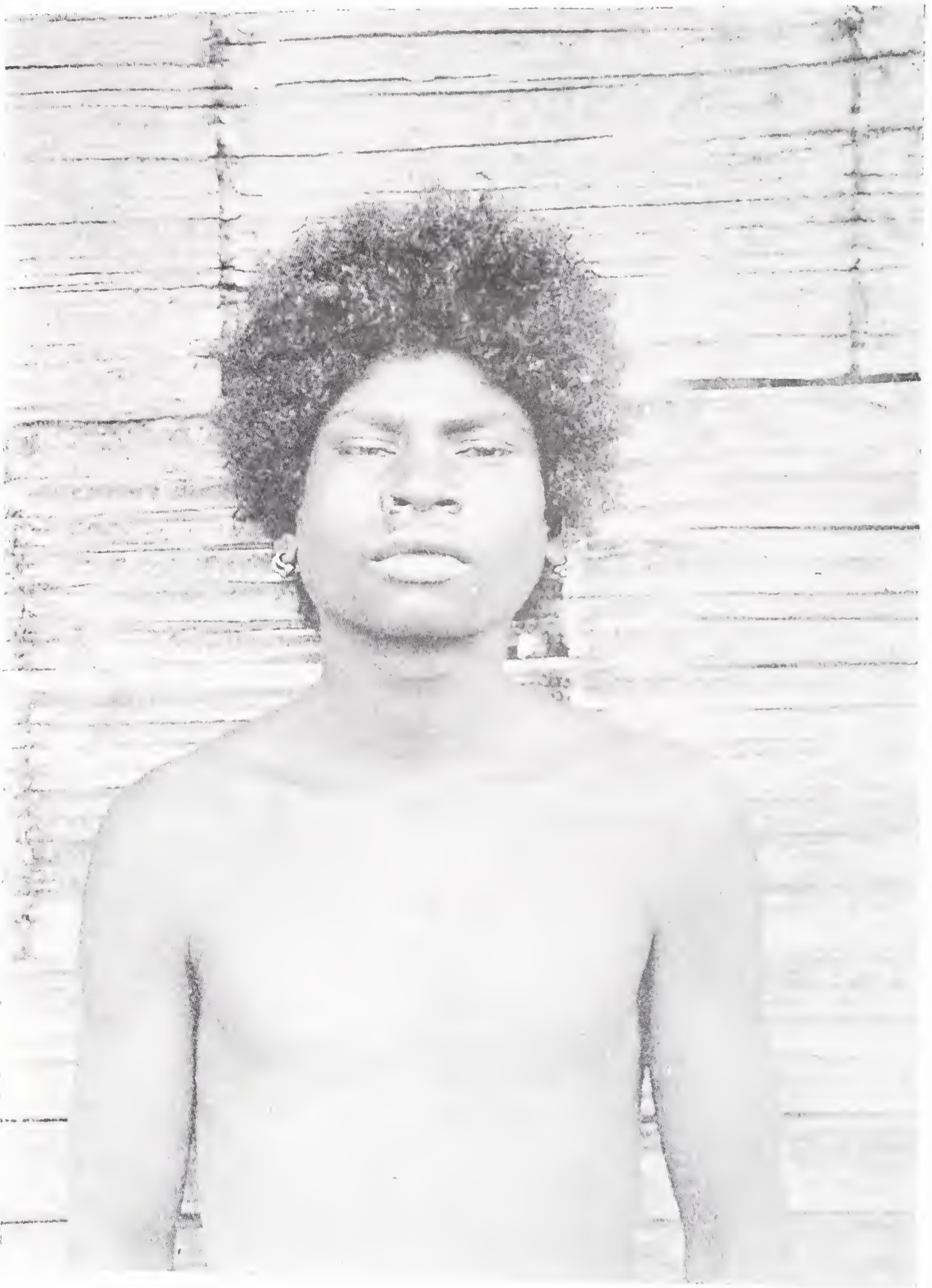
swollen by a recent burst of monsoon rain. Mount Stuart is easily accessible by a ghât road fit for bullock-cart traffic, and I lodge a protest against the short cut, up the steep and slippery boulders of which a pilot forest-guard conducted me, as being a severe trial to both lungs and legs of one fresh from city life in the plains, and a course of a daily maximum of 98° to 104° in the shade.

The Kâdir forest-guards, of whom there are several serving under the Government, looked, except for their noses, very unjungle-like by contrast with their fellow-tribesmen, being smartly dressed in regulation Norfolk jacket, knickerbocker-trousers, pattis (leggings), buttons, and accoutrements.

On arrival at the forest dépôt, with its comfortable bungalows and Kâdir settlement, I was told by a native servant that his master was away, as an "elephant done tumble in a fit." My memory went back to the occasion, many years ago, when I took part in the autopsy of an elephant, which died in convulsions at the London Zoological Gardens. Its brain, I remember, weighed twelve pounds, and was very difficult of extraction owing to splintering of the cancellous tissue lining the air-sinuses. It transpired later in the day that a young and grown-up cow elephant had tumbled, not in a fit, but into a pit made with hands. The story has a philological significance, and illustrates the difficulty which the Tamulian experiences in dealing with the letter P.

An incident is still cherished at Mount Stuart in connection with a sporting 'globe-trotter,' who was accredited to the Conservator of Forests for the purpose of putting him on to 'bison' (the gaur—*Bos gaurus*) and other big game. On arrival at the depot he was informed that his host had gone to see the "ellipence." Incapable of translating the pigeon-English of the Pariah butler, and concluding that a financial reckoning was being suggested, he ordered the servant to pay the baggage coolies their elli-pence, and send them away. To a crusted Anglo-Indian it is clear that ellipence could only mean elephants.

The salient characteristics of the Kâdirs, which will be dealt with in detail hereafter, may be briefly summed up as follows: short stature; dark skin; platyrrhine. Men and women have the incisor teeth chipped. Women wear bamboo combs in the back-hair. Those whom I met with spoke a Tamil patois, running up the scale in talking, and



KADIR MAN.

finishing, like a Suffolker, on a higher note than they commenced on. But I am told that some of them speak a mixture of Tamil and Malayālam.

The Kādīrs afford a typical example of happiness without culture. Unspoiled by education, the advancing wave of which has not yet engulfed them, they still retain many of their simple "manners and customs." Quite refreshing was it to hear the hearty shrieks of laughter of the nude curly-haired children, wholly illiterate, and happy in their ignorance, as they played at funerals, or indulged in the amusement of making mud pies, and scampered off to their huts on my appearance. The uncultured Kādir, living a hardy out-door life, and capable of appreciating to the full the enjoyment of an "apathetic rest" as perfect bliss, has, I am convinced, in many ways, the advantage over the poor under-fed student with a small-paid appointment under Government as the narrow goal to which the laborious passing of examination tests leads.

Living an isolated existence, confined within the thinly-populated jungle, where Nature furnishes the means of obtaining all the necessities of life, the Kādir possesses little, if any, knowledge of cultivation, and objects to doing work with a māmuti, the instrument which serves the gardener in the triple capacity of spade, rake, and hoe. But armed with a keen-edged bill-hook he is immense. As Mr. O. H. Bensley says¹: "The axiom that the less civilised men are, the more they are able to do every thing for themselves, is well illustrated by the hill-man, who is full of resource. Give him a simple bill-hook, and what wonders he will perform. He will build houses out of etāh, so neat and comfortable as to be positively luxurious. He will bridge a stream with canes and branches. He will make a raft out of bamboo, a carving knife out of etāh, a comb out of bamboo, a fishing-line out of fibre, and a match from dry wood. He will find food for you where you think you must starve, and show you the branch which, if cut, will give you drink. He will set traps for beasts and birds, which are more effective than some of the most elaborate products of machinery." A European, overtaken by night in the jungle, unable to light fire by friction or to climb trees to gather fruits, ignorant of the edible roots and berries, and afraid of wild beasts, would

¹ Lecture delivered at Trivandrum. M.S.

in the absence of comforts, be quite as unhappy and ill-at-ease as a Kādir surrounded by plenty at an official dinner-party.

At the forest depôt the Kādir settlement consists of neatly constructed huts, made of bamboo deftly split with a bill-hook in their long axis, thatched with leaves of the teak tree (*Tectona grandis*) and bamboo (*Beesha travancorica*), and divided off into verandah and compartments by means of bamboo partitions. But the Kādirs are essentially nomad in habit, living in small communities, and shifting from place to place in the jungle, whence they suddenly re-appear as casually as if they had only returned from a morning stroll instead of a long camping expedition. In this way the wondrous type figured in Plate XXVI, of whom I knew by repute, turned up to my joy during my stay at Mount Stuart, and was instantly photographed, lest he should disappear again as mysteriously as he arrived. When wandering in the jungle, the Kādirs make a rough lean-to shed covered over with leaves, and keep a small fire burning through the night, to keep off bears, elephants, tigers, and leopards. They are, I am told, fond of dogs, which they keep chiefly as a protection against wild beasts at night. The camp fire is lighted by means of a flint and the floss of the silk-cotton tree (*Bombax malabaricum*), over which powdered charcoal has been rubbed. Like the Kurumbas, the Kādirs are not, in a general way, afraid of elephants, but are careful to get out of the way of a cow with young, or a solitary rover, which may mean mischief. On the day following my descent from Mount Stuart, a Wudder cooly woman was killed on the ghât road by a solitary tusker. Familiarity with wild beasts, and comparative immunity from accident, have bred contempt for them, and the Kādirs will go where the European, fresh to elephant land, fears to tread, or conjures every creak of a bamboo into the approach of a charging tusker. As an example of pluck worthy of a place in Kipling's 'Jungle-book,' I may cite the case of a hill-man and his wife, who, overtaken by night in the jungle, decided to pass it on a rock. As they slept, a tiger carried off the woman. Hearing her shrieks, the sleeping man awoke, and followed in pursuit in the vain hope of saving his wife. Coming on the beast in possession of the mangled corpse, he killed it at close-quarters with a spear. Yet he was wholly unconscious that he had performed an act of heroism worthy of the bronze cross 'for valour.'



KADIR WOMAN.

The Kādīrs carry loads strapped on the back over the shoulders by means of fibre, instead of on the head in the manner customary among coolies in the plains; and women on the march may be seen carrying the cooking utensils on their backs, and often have a child strapped on the top of their household goods. The dorsal position of the babies, huddled up in a dirty cloth, with the ends slung over the shoulders and held in the hands over the chest, at once caught my eye, as it is contrary to the usual native habit of straddling the infants across the loins as a saddle.

The Kādīrs have never claimed, like the Todas, and do not possess any land on the hills. But the Government has declared the absolute right of the hill tribes to collect all the minor forest produce, and to sell it to the Government through the medium of a contractor, whose tender has been previously accepted. The contractor pays for the produce in coin at a fair market rate, and the Kādīrs barter the money so obtained for articles of food with contractors appointed by Government to supply them with their requirements at a fixed rate, which will leave a fair, but not exorbitant margin of profit to the vendor. The principal articles of minor forest produce of the Ānaimalai hills are wax, honey, cardamoms, myrabolams, ginger, dammar, turmeric, deer horns, elephant tusks, and rattans. And of these, cardamoms, wax, honey, and rattans are the most important. Honey and wax are collected at all seasons, and cardamoms from September to November. The total value of the minor produce collected, in 1897-98, in the South Coimbatore division (which includes the Ānaimalais) was Rs. 7,886. This sum was exceptionally high owing to a good cardamom crop. An average year would yield a revenue of Rs. 4,000—5,000, of which the Kādīrs receive approximately 50 per cent. They work for the Forest department on a system of short advances for a daily wage of four annas. And, at the present day, the interests of the Forest department and planters, who have acquired land on the Ānaimalais, both anxious to secure hill men for labour, have come into mild collision.

Some Kādīrs are good trackers, and a few are good shikāris. A zoological friend, who had nicknamed his small child his "little shikarēē" (= little sportsman) was quite upset because I, bailing from India, did not recognise the word with its misplaced accent. One Kādir, named Viapoori Muppan, is still held in the memory of Europeans,

who made a good living, in days gone by, by shooting tusk-ers, and had one arm blown off by the bursting of a gun. He is reputed to have been a much married man, greatly addicted to strong drinks, and to have flourished on the proceeds of his tusks. At the present day, if a Kādir finds tusks, he must declare the find as treasure-trove, and hand it over to Government, who rewards him at the rate of Rs. 15 to Rs. 25 per maund of 25 lbs. according to the quality. Government makes a good profit on the transaction, as exceptionally good tusks have been known to sell for Rs. 5 per lb. If the find is not declared, and discovered, the possessor thereof is punished for theft according to the Act. By an elastic use of the word cattle, it is, for the purposes of the Madras Forest Act, made to include such a heterogeneous zoological collection of mammalia as elephants, sheep, pigs, goats, camels, buffaloes, horses—and asses. A classification which recalls to mind the occasion on which the Flying-fox or Fox-bat was included in an official list of the insectivorous birds of the Presidency; and, further, a report on the wild animals of a certain district, which was triumphantly headed with the “wild tatttu,” the long-suffering, but pig-headed country pony, at whose hands most touring officers have “suffered much misery” (as the Natives expressed their feelings when a certain fast-bowling Colonel went on in a cricket match).

Often, when out on the tramp with the late Government Botanist, Mr. M. A. Lawson, I have heard him lament that it is impossible to train arboreal monkeys to collect specimens of the fruit and flowers of lofty forest trees, which are inaccessible to the ordinary man. Far superior to any trained Simian is the Kādir, who, by means of pegs or notches, climbs even the tallest masts of trees with an agility which recalls to memory the celebrated picture in ‘Punch,’ representing Darwin’s ‘Habit of climbing plants.’ For the ascent of comparatively low trees, notches are made with a bill-hook, alternately right and left, at intervals of about thirty inches. To this method the Kādir will not have recourse in wet weather, as the notches are damp and slippery, and there is the danger of an insecure foot-hold. In the system of scaling a tree by means of pegs (*vide* Plate XXVIII), a number of pegs, made of sharp-pointed bamboo, are carried round the loins, and driven securely into the tree by sharp blows with a bill-hook. The pegs are left in the tree, and a fresh set used for the next tree.



KADIR TREE-CLIMBING.

I gather, from an anonymous account of the process by one who had considerable knowledge of the Kādīrs, that “they will only remove the hives during dark nights, and never in the day-time or on moonlight nights. In removing them from cliffs, they use a chain made of cane or rattan, fixed to a stake or a tree on the top. The man, going down this fragile ladder, will only do so while his wife or son watches above to prevent any foul play. They have a superstition that they should always return the way they go down, and decline to get to the bottom of the cliff, although the distance may be less, and the work of re-climbing avoided. For hives on trees, they tie one or more long bamboos to reach up to the branch required, and then climb up. They then crawl along the branch until the hive is reached. They devour the bee-bread and the bee-maggots or larvæ, swallowing the wax as well.” In a note on a shooting expedition in Travancore,² Mr. J. D. Rees, describing the collection of honey by the Kādīrs, of the southern hills, says that they “descend giddy precipices at night, torch in hand, to smoke out the bees, and take away their honey. A stout creeper is suspended over the abyss, and it is established law of the jungle that no brother shall assist in holding it. But it is more interesting to see them run a ladder a hundred feet up the perpendicular stem of a tree, than to watch them disappearing over a precipice. Axe in hand, the honey-picker makes a hole in the bark for a little peg, standing on which he inserts a second peg higher up, ties a long cane from one to the other, and by night—for the darkness gives confidence—he will ascend the tallest trees, and bring down honey without any accident.” I have been told, with how much of truth I know not, that, when a Kādir goes down the face of a rock or precipice in search of honey, he sometimes takes with him, as a precautionary measure, and guarantee of his safety, the wife of the man who is holding the ladder above.

An important ethnographic fact, and one which is significant, is that the detailed description of tree-climbing by the Dyaks of Borneo, as given by Wallace,³ might have been written on the Ānaimalai hills, and would apply equally well in every detail to the Kādir. “They drove in,” Wallace writes, “a peg very firmly at about three feet from the ground, and, bringing one of the long bamboos, stood it upright close to the tree, and bound it firmly to the two first

² *Nineteenth Century*, 1898.

³ ‘Malay Archipelago’.

pegs by means of a bark cord and small notches near the head of each peg. One of the Dyaks now stood on the first peg and drove in a third about level with his face, to which he tied the bamboo in the same way, and then mounted another step, standing on one foot, and holding by the bamboo at the peg immediately above him, while he drove in the next one. In this manner he ascended about twenty feet, when the upright bamboo became thin; another was handed up by his companion, and this was joined on by tying both bamboos to three or four of the pegs. When this was also nearly ended, a third was added, and shortly after the lowest branch of the tree were reached, along which the young Dyak scrambled.

“The ladder was perfectly safe, since, if any one peg were loose or faulty, the strain would be thrown on several others above and below it. I now understood the use of the line of bamboo pegs sticking in trees, which I had often seen.” Such is the description given by Wallace, and it may be compared with Plate XXVIII, which represents a tree with a line of pegs left in it, and an agile young Kādir climbing a tree by means of pegs with bamboos bound to them.

In their search for produce in the evergreen forests of the higher ranges, with their heavy rainfall, the Kādīrs become unpleasantly familiar with leeches and blue bottle flies, which flourish in the moist climate. And it is recorded that a Kādir, who had been gored and wounded by a bull ‘bison,’ was placed in a position of safety while a friend ran to the village to summon help. He was not away for more than an hour, but, in that short time, flies had deposited thousands of maggots in the wounds, and, when the man was brought into camp, they had already begun burrowing into the flesh, and were with difficulty extracted. On another occasion, the eye-witness of the previous unappetising incident was out alone in the forest, and shot a tiger two miles or so from his camp. Thither he went to collect coolies to carry in the carcase, and was away for about two hours, during which the flies had, like the child in the story, ‘not been idle,’ the skin being a mass of maggots and totally ruined. I have it on authority that, like the Kotas of the Nilgiris, the Kādīrs will eat the putrid and fly-blown flesh of carcases of wild beasts, which they come across in their wanderings. To a dietary which includes succulent roots, which they upturn with a digging stick, sheep, fowls, rock-snakes (Python), deer, porcupines, rats (field, not



KADIR BOY.

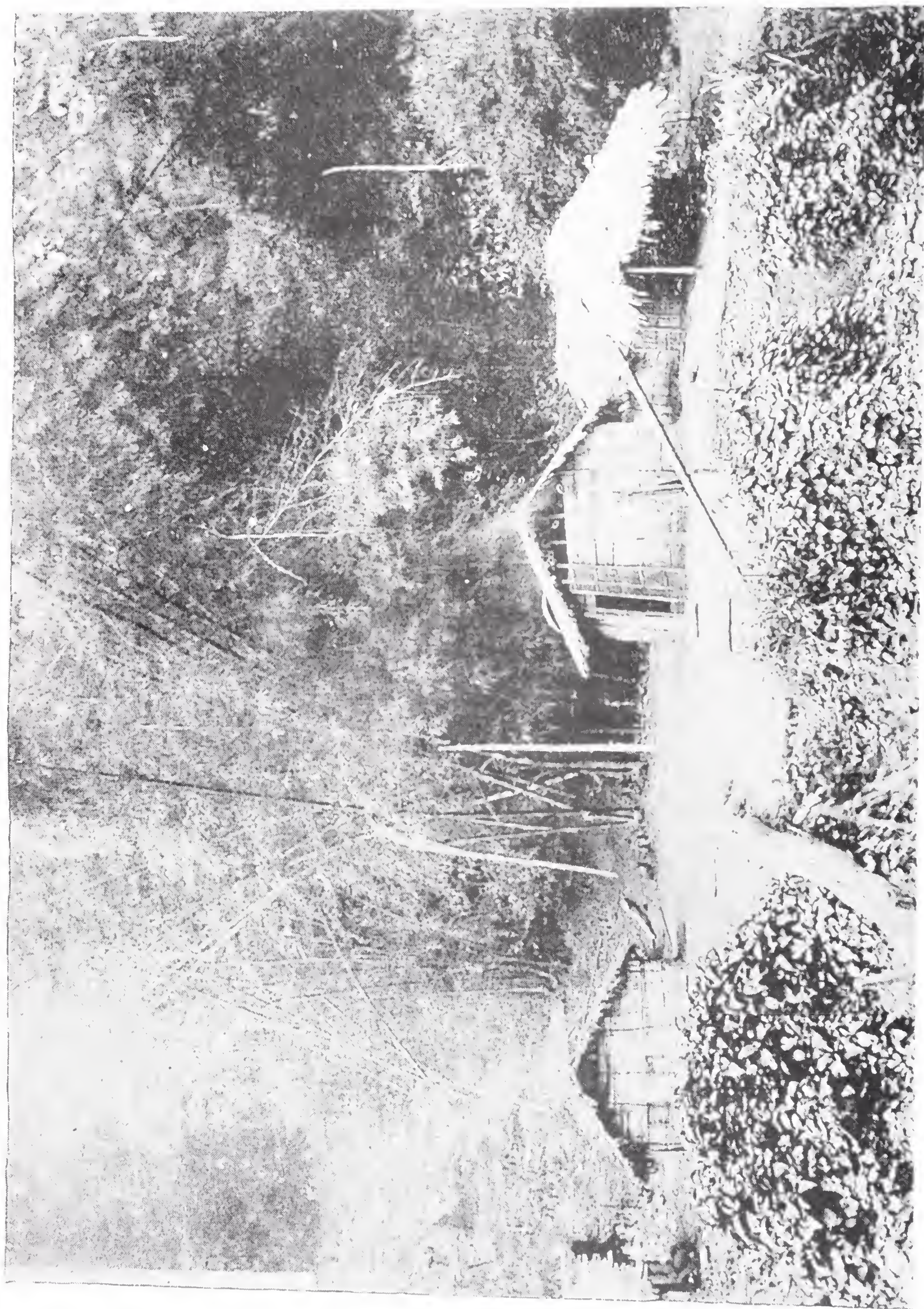
house), wild pigs, monkeys, &c., they do credit by displaying a hard, well-nourished body. The mealy portion of the seeds of the *Cycas* tree, which flourishes on the lower slopes of the Ānaimalais, forms a considerable addition to the *ménu*. In its raw state the fruit is said to be poisonous, but it is evidently wholesome when cut into slices, thoroughly soaked in running water, dried, and ground into flour for making cakes, or baked in hot ashes. The Kādir is said to prefer roasting and eating the flesh of animals with the skin on. For catching rats, jungle-fowl, &c., he resorts to cunningly devised snares and traps made of bamboo and fibre, as a substitute for a gun. Porcupines are caught by setting fire to the scrub jungle round them as they lie asleep, and thus smoking and burning them to death.

When a Kādir youth's thoughts turn towards matrimony, his parents, who select his bride, go to the parents of the girl, and ask their consent to the proposed alliance. If this is accorded, a dinner-party is given at the home of the bridegroom-elect. During the period of engagement the young man's parents give meals of rice and other things to their future daughter-in-law. They make presents too, in view of purchase money, of a new turban and cloth to the girl's father, and a new cloth to her mother. On the wedding day a feast of rice, sheep, fowls, and other luxuries, is given by the parents of the bridegroom, to which the Kādir community is invited. The bride and bridegroom stand beneath a *pandāl* (arch) decorated with flowers, which is erected outside the home of the bridegroom, while men and women dance separately to the music of drum and pipe. The bridegroom's mother or sister ties the *tāli* (marriage badge) of gold or silver round the bride's neck, and her father puts a turban on the head of the bridegroom. The contracting parties link together the little fingers of their right hands as a token of their union, and walk in procession round the *pandāl*. Then, sitting on a reed mat of Kādir manufacture, they exchange betel. The marriage tie can be dissolved for incompatibility of temper, disobedience on the part of the wife, adultery, &c., without appeal to any higher authority than a council of elders, who hear the arguments on both sides, and pronounce judgment on the evidence. As an illustration of the manner in which such a council of hill-men disposes of cases, Mr. Bensley cites the case of a man who was made to carry forty basket-loads of sand to the house of the person against whom he

had offended. He points out how absolute is the control exercised by the council. Disobedience would be followed by expulsion, and expulsion would mean being turned out into the jungle, to obtain a living in the best way one could.

By one Kādir informant I was assured, as he squatted on the floor of my bungalow at "question time," that it is essential that a wife should be a good cook, in accordance with the maxim that the way to the heart is through the mouth. How many men in civilised western society, who suffer from marrying a wife wholly incompetent, like the first Mrs. David Copperfield, to conduct the housekeeping, might well be envious of the system of marriage as a civil contract to be sealed or unloosed according to the cookery results! Polygyny is indulged in by the Kādirs, who agree with Benedick that "the world must be peopled," and hold more especially that the numerical strength of their own tribe must be maintained. The plurality of wives seems to be mainly with the desire for offspring, and the father-in-law of one of the forest-guards informed me that he had four wives living. The first two wives producing no offspring, he married a third, who bore him a solitary male child. Considering the result to be an insufficient contribution to the tribe, he married a fourth, who, more prolific than her colleagues, gave birth to three girls and a boy, with which he remained content. In the code of polygynous etiquette, the first wife takes precedence over the others, and each wife has her own cooking utensils.

Special huts are maintained for women during menstruation and parturition. For three months after the birth of a child, the woman is considered unclean. When the infant is a month old, it is named without any elaborate ceremonial, though the female friends of the family collect together. Sexual intercourse ceases on the establishment of pregnancy, and the husband indulges in promiscuity. Widows are not allowed to re-marry, but may live in a state of concubinage. No ceremony is performed when boys or girls reach puberty. Women are said to suckle their children till they are two or three years old, and a mother has been seen putting a lighted cigarette to the lips of a year old baby immediately after suckling it. If this is done with the intention of administering a sedative, it is less baneful than the pellet of opium administered to Anglo-Indian babies rendered fractious by troubles climatic, dental,



KADIR HUTS.

and other. The Kādir women chew tobacco. The men smoke the coarse tobacco as sold in the bazārs, and showed a marked appreciation of Spencer's Torpedoes No. 1, which I had to distribute among them in lieu of the cheaper cheroots, which generally travel with me for the purposes of bribery and conciliation.

The religion of the Kādirs is a crude polytheism, and vague worship of stone images or invisible gods. It is, as Mr. Bensley expresses it, "an ejaculatory religion, finding vent in uttering the names of the gods and demons." The gods, as enumerated and described to me, were as follows:—

(1) Paikutlātha—a projecting rock overhanging a slab of rock, on which are two stones set up on end. Two miles east of Mount Stuart.

(2) Athuvisariamā—a stone enclosure, 10 to 15 feet square, almost level with the ground. It is believed that the walls were originally ten feet high, and that the mountain has grown up round it. Within the enclosure there is no representation of the god. Eight miles north of Mount Stuart.

(3) Vanathavāthi has no shrine, but is worshipped anywhere as an invisible god.

(4) Iyappaswāmi—a stone set up beneath a teak tree, and worshipped as a protector against various forms of sickness and disease. In the act of worshipping, a mark is made on the stone with ashes. Two miles and a half from Mount Stuart, on the ghāt road to Sēthumadai.

(5) Māsanyātha—a female recumbent figure in stone on a masonry wall in an open plain near the village of Anaimalai, before which trial by ordeal is carried out. The goddess has a high repute for her power of detecting thieves or rogues. Chillies are thrown into a fire in her name, and the guilty person suffers from vomiting and diarrhoea.

When Kādirs fall sick, they worship the gods by saluting them with their hands to the face, burning camphor, and offering up fruits, cocoanuts and betel.

The Kādir dead are buried in a grave, or, if death occurs in the depths of the jungle, with a paucity of hands available for digging, the corpse is placed in a cervice between the rocks, and covered over with stones. The grave is dug from four to five feet deep. There is no special burial ground, but some spot in the jungle, not far from the scene of death, is selected. A band of music—drum and

pipe—plays weird dirges outside the hut of the deceased, but does not accompany the funeral party to the grave. The body is carried on a bamboo stretcher, lying on a mat, and covered over with a cloth and mat. As it leaves the hut, rice is thrown over it. The funeral ceremony is simple in the extreme. The corpse is laid in the grave on a mat in the recumbent posture with head towards the east, and covered over with a mat and leaves. The grave is then filled in with earth. No stone, or sepulchral monument of any kind, is erected, to indicate the spot. Two years after death a memorial festival, called karrumanthram, is held, at which the Kādīrs are invited to a feast with drinks and a dance. The Kādir believes that the dead go to heaven, which is up in the sky, but has no views as to what sort of place it is, as there is no one who can tell him. He is, in a mild way, a philosopher.

On a certain Monday in the months of Ādi and Āvani (July-September) the Kādīrs observe a festival called nōmbu, during which a feast is held, after they have bathed and anointed themselves with oil. It was, they say, observed by their ancestors, but they have no definite tradition as to its origin or significance.

Turning now to the characteristics of the Kādīrs. They belong to the curly-haired gentes dolichocephalæ orthognathæ of Retzius, which, being translated, signifies that they are long-headed people with the upper jaw straight when viewed in profile, and have no resemblance to the prognathous (prominent-jawed) and woolly-haired Negro. According to Mr. Bensley “the Kādir has an air of calm dignity, which leads one to suppose that he had some reason for having a more exalted opinion of himself than that entertained for him by the outside world. A forest officer of a philanthropic turn had a very high opinion of the sturdy independence and blunt honesty of the Kādir, but he once came unexpectedly round a corner, to find two of them exploring the contents of his portmanteau, and subsequent search revealed that they had abstracted a pair of scissors, a comb, and a looking-glass.” “The Kādīrs,” Mr. Nicholson writes⁴ “are, as a rule, rather short in stature and deep-chested, like most mountaineers; and, like many true mountaineers, they rarely walk with a straight leg. Hence their thigh muscles are often abnormally developed at the

⁴ ‘Manual of the Coimbatore District.’



KADIR GIRL.

expense of those of the calf. Hence, too, in part, their dislike to walking long distances on level ground, though their objection, mentioned by Colonel Douglas Hamilton, to carrying loads in the plains is deeper rooted than that arising from mere physical disability. This objection is mainly because they are rather a timid race, and never feel safe out of the forests. They have also often affirmed that the low-country air is very trying to them." As a matter of fact, they very rarely go down to the plains, even as far as the village of Ānaimalai, only fifteen miles distant from Mount Stuart. One woman, whom I saw, had, however, been as far as Palghāt by railway from Coimbatore, and had returned thence very much up-to-date in the matter of jewelry and the latest barbarity in imported piece-good sārīs.

With the chest-girth of the Kādīrs, as well as their general muscular development, I was very much impressed; and the following comparative series of figures shows that, so far as wind is concerned, they would, like other jungle tribes of short stature, be valuable camp-followers in a mountaineering expedition.

			Average height. CM.	Average chest. CM.	Average chest relative to stature 100.
Paniyans	..	..	157·4	81·5	51·8
Kādīrs	..	..	157·7	80·5	51·4
Kurumbas	..	..	157·5	79·2	50·3
Tamil Pariahs	..	..	162·1	79·3	48·9
Eurasians (poorer classes)	..	..	166·6	79·1	47·7

The most interesting custom, which prevails among the Kādīrs, and among them alone, so far as I know, of the entire population of the Indian peninsula, is that of chipping all or some of the incisor teeth, both upper and lower, into the form of a sharp-pointed, but not serrated cone. The operation, which is performed with a chisel or bill-hook and file by members of the tribe skilled thereat, on boys at the age of eighteen, and girls at the age of ten or thereabouts, has been thus described: "The girl to be operated on lies down, and places her head against a female friend, who holds her head firmly. A third woman takes a sharpened bill-hook, and chips away the teeth till they are shaded to a point, the girl operated on writhing and groaning with the pain. After the operation she looks dazed, and in a

very few hours the face begins to swell. Swelling and pain last for a day or two, accompanied by severe headache." Whether this practice is one which the Kādir has hit on spontaneously in comparatively modern times, or whether it is a relic of a custom resorted to by their ancestors of long ago, which remains as a stray survival of a custom once more widely practised among the remote inhabitants of Southern India, cannot be definitely asserted, though I incline to the latter view. Let us, however, see from the available literature on the subject what is the present-day geographical distribution of the practice of tooth chipping or filing, as a possible clue to the source from which it was derived. In 'Anthropological Notes and Queries' it is stated that "it is chiefly in Africa that the custom of deforming the teeth is practised; and, as different modes of doing it prevail among different tribes, the characters afforded in this way will probably be found of considerable ethnographical importance. The practice appears in general to be limited to the front or incisor teeth, and consists either in extracting, or, more usually perhaps, in breaking off one or more of them, or of filing them either to a sharp single point, or in serrate fashion." Westermarck⁵ informs us that, when the age of puberty draws near, "in several parts of Africa and Australia they knock out some teeth, knowing that they would otherwise run the risk of being refused on account of ugliness. Mr. Crawford tells us that, in the Malay Archipelago, the practice of filing and blackening the teeth is a necessary prelude to marriage, the common way of expressing the fact that a girl has arrived at puberty being that 'she has had her teeth filed,' and, with reference to some of the Natives of the Congo countries, Tuckey says that the two upper front teeth are filed by the men, so as to make a large opening, and scars are raised on the skin, both being intended by the men as ornamental, and principally done with the idea of rendering themselves agreeable to the women." Further, Darwin writes⁶ "The Natives of the Upper Nile knock out the four front teeth, saying that they do not wish to resemble brutes. Further south, the Batokas knock out only the two upper incisors, which, as Livingstone remarks, gives the face a hideous appearance; but these people think the presence of the incisors most unsightly, and, on beholding some Europeans, cried out 'Look at the great teeth'! In parts of Africa

⁵ 'History of Human Marriage.'

⁶ 'Descent of Man.'

and the Malay Archipelago the Natives file the incisors into points like a saw, or pierce them with holes, into which they insert studs." I have somewhere read that the practice of tooth-filing is resorted to, not for ornament or as a means of sexual attraction, but that the Natives may not degrade themselves by using all their teeth in eating like a cow. Be its origin what it may among the Kādīrs, I cannot but think that the geographical distribution of the practice of tooth chipping, of the use of the boomerang, and the custom of dilating the lobes of the ears, are important links of evidence in connection with the Dravidian problem, which is discussed later on.

A friendly old woman, with huge discs in the widely dilated lobes of the ears, and a bamboo five-pronged comb in her back-hair, who acted as spokesman on the occasion of a visit to a charmingly situated settlement in a jungle of magnificent bamboos by the side of a mountain stream, pointed out to me, with conscious pride, that the huts were largely constructed by the females, while the men worked for the sircar (Government). The females also carry water from the streams, collect fire-wood, dig up edible roots, and carry out the sundry household duties of a housewife. Both men and women are clever at plaiting bamboo baskets, necklets, &c. I was told one morning by a Kādir man, whom I met on the road, as an important item of news, that the women in his settlement were very busy dressing to come and see me—an event as important to them as the dressing of a *débutante* for presentation at the Court of St. James'. They eventually turned up without their husbands, and evidently regarded my methods as a huge joke organised for the amusement of themselves and their children. The hair was neatly parted, anointed with a liberal application of cocoanut oil, and decked with wild flowers. Beauty spots and lines had been painted with coal-tar dyes on the forehead, and turmeric powder freely sprinkled over the top of the heads of the married women. Some had even discarded the ragged and dirty cotton cloth of every-day life in favour of a colour-printed imported *sári*. One bright, good-looking young woman, who had already been through the measuring ordeal, acted as an efficient lady-help in coaching the novices in the assumption of the correct positions. She very readily grasped the situation, and was manifestly proud of her temporary elevation to the rank of standard-bearer to Government. The Kādir women, when they meet a European on the road,

with their body-cloths wrapped round them in such a way as to expose the upper halves of their breasts, manifest symptoms of shyness and modesty, and stand aside with face averted so that they cannot see the stranger, on the same principle which prompts some Eastern women, if surprised when taking a bath, to turn the face, no further concealment being necessary. Ideas of modesty, it has been said, are altogether relative and conventional, and it is not the feeling of shame that has given rise to the covering of the body, but the covering that has provoked the feeling of shame. This is well illustrated by the difference in the behaviour of the Native females of Malabar and the Tamil women of the East Coast. In Malabar the body-clothing of the Nāyar, Tiyan, Cheruman females, etc., above the loins is exceedingly scanty. As Mr. Logan says : ⁷ "The women clothe themselves in a single white cloth of fine texture reaching from the waist to the knees, and occasionally, while abroad, they throw over the shoulder and bosom another similar cloth. But by custom the Nāyar women go uncovered from the waist. Upper garments indicate lower caste, or sometimes, by a strange reversal of Western notions, immodesty." The observant Abbé Dubois noticed that, "of all the women in India, it is especially the courtesans (dancing-girls or deva-dasis) who are the most decently clothed, as experience has no doubt taught them that for a woman to display her charms damps sensual ardour instead of exciting it, and that the imagination is more easily captivated than the eye."

A Tamil woman, young or old and wizen, going along the high road, with breasts partially uncovered by her ample body-cloth, will, when she sees a European coming, pull the cloth over them from a feeling of shame in the presence of the foreigner, which is absent in the presence of her fellow country-men. So, too, a Tamil woman, when undergoing the process of measurement at my hands, is most particular in arranging her upper garment so as to conceal her breasts, whereas a Malabar woman has no hesitation in appearing with breasts completely exposed, or in throwing off the slender wrapper which may cover her shoulders, and considers the exposure in no way immodest. I have heard that the women of a tribe (I think in South Canara), whose leafy clothing is, in their home surroundings, reduced to slender proportions, when they come into a town,

⁷ 'Manual of Malabar.'

walk in Indian file, concealing their nakedness by means of a series of cloths stitched together, spread out between them and extending down the line. A friend, bartering for the two bead necklets, which constituted the full-dress of a jungle girl, had no difficulty in securing one, but no bribe would tempt her to part with the second, as, in its absence, she would be naked.

The chief characteristics of the Kādīrs, their system of personal adornment, etc., will be gathered from the following illustrative cases. It may be noted that the Kādīrs do not practise tattooing.

Man, æt. 25. Height 157·4 cm. Nasal index 102·3. Chest girth 86·4 cm. . Abundant curly hair, parted in the middle line, tied with string in a bunch (kudumi) behind, and saturated with cocoanut oil. Skin dark-brown. Slight moustache. Hair feebly developed on trunk and extremities. Upper and lower incisor teeth chipped. Only stump remaining of one tooth, which was broken during the operation. Dirty plain cotton loin-cloth. Two brass ornaments in lobe of each ear. Carries bill-hook and pegs for tree-climbing, hanging by fibre rope from left loin.

Man, æt. 30. Hair long and wavy, tied in a loose bunch behind. Three brass ornaments in lobe of each ear. Brass rings on right ring and little fingers.

Man, æt. 27. White turban. Glass bead necklet. Hair clipped short in front in observance of a death ceremony.

Man, æt. 23. . Skin as dark as that of a typical Irula of the Nilgiris. Unparted and untrimmed mass of long curly hair. Very sturdy build. Hard, well developed muscles. Height 156·2 cm. Chest girth 87·5 cm. Shoulders 42 cm. Nasal index 100.

Man, æt. 30. Slight billy-goat beard as well as moustache (unusual). Steel bangle on left upper arm.

Man, æt. 28. Steel ring on left second toe.

Boy, æt. 18. Hair worn in a curly fringe in front, plastered down on top with cocoanut oil, and tied in a compact bunch behind. Brass, bead, and plaited grass necklets. Brass ornament in lobe of each ear. Brass ring with ornament pendent from link-chain in helix of each ear.

It is sometimes difficult to distinguish adolescent youths, with curly fringe, breasts concealed by a cotton cloth, and necklets, from girls. And I was myself several times caught in an erroneous diagnosis of sex.

Boy, æt. 15—16. Plaited grass necklet, and necklet of big brass and glass beads. Brass ring with pendent ornament in helix of left ear. Brass ornament in left lobe. Plug of wood in right nostril.

Boy, æt. 15—16. Mass of long curly hair. Flat bridge to nose. Upper and lower lips conspicuously everted (*cf.* Plate XXVI). Brass and glass bead ornament in right helix. Three brass ornaments, and brase wire with pendent ornaments in left helix. Two brass ornaments in left lobe. Plaited grass necklet. Brass bangle on left wrist.

Boy, æt. 5—6. Clean-shaved on top and front of head. Wooden plug in lobe of each ear. Four upper incisor teeth chipped.

Boy, æt. 5. Hair shaved on top and front of head, tied in a bunch behind. Chunám (lime) smeared over forehead for ornament. Brass ring in lobe of each ear. Steel ring on right wrist.

Boy, æt. 5. Hair a mass of short curls without parting.

Infant in arms. Head shaved all over, except frontal lock. Bead necklace with dried tortoise foot pendent to ward off fever.

Infant in arms. String round neck with wooden imitation of tiger's claw to act as a charm.

Infant in arms. Steel necklet with jungle-worn crocodile tooth pendant, mimicking a phallic emblem, and also supposed to ward off attacks from a mythical water elephant, which is believed to live in the mountain streams.

Infant in arms. Glass bead necklets. Steel bangle on right upper arm. Steel wire round left ankle.

Infant in arms. Necklet made of the seeds of *Coix lachryma* (Job's tears) strung together.

Woman, æt. 23. Height 142·8 cm. Nasal index 94·6. Dirty cotton body and loin cloths. Upper and lower incisor teeth chipped. Hair parted in middle, smoothed with cocoanut oil, and tied in a knot behind. Turmeric powder sprinkled on top of head (forbidden to unmarried girls and widows). Dark blue coal-tar dye streak in mid-frontal line and white spot on glabella. Brass and steel rings in right helix; steel rings in left helix. Cajan roll in dilated lobe of each ear. String and bead necklets. Five steel bangles on right wrist; three steel bangles on left wrist.

Woman, æt. 22. Lantana flowers in hair. White spot on glabella. Wooden plug in each helix. Brass ring in lobe of right ear. Plaited grass and bead necklets.

Woman, æt. 40. Thread round neck, with bases of porcupine quills pendant.

Woman, æt. 45. Bamboo comb, with ornamental geometric patterns scratched on it, worn in back hair and used for doing hair. Lobes of ears widely dilated, pendulous and as elastic as India-rubber. Length of slit in lobes 5·5 cm. Wears no ornaments, as she is a widow.

Woman, æt. 25. Turmeric powder on top of head. Blue and white beauty spots on glabella. Brass and bead ornament in septum of nose. Brass ornament in left nostril. Solid wooden disc in lobe of right ear; cajan roll in left lobe. Wooden plug and brass pendant ornament in each helix. Brass and glass bead necklet with imitation Venetian sequins. Steel bangles on right upper arm and forearm. Steel and six armlets on left upper arm. Three steel armlets on left forearm. Spiral steel ring on right thumb and little finger, and left thumb

Girl, æt. 4. Plug of wood in lobe of each ear. Glass bead necklets. Steel ring on right first finger. Brass bangle on left wrist.

Since writing the above account, I have come across the following note, relating to the Kādīrs, by Captain Cotton, in the 'Madras Journal of Literature and Science,' 1858. "These little dwarfish people," he says, "file their front teeth into points, to facilitate their eating the hardest roots. There is some nerve shown in this, and we may look with wonder and respect upon the exiled lords of the ancient land, when we see that, rather than serve those who usurped the country, they chose to live where the food was beyond their natural powers, and could be eaten only by such a preparation of their teeth. It is possible that, in the absence of better arms, they reckoned upon these pointed teeth as weapons, in case their conquerors should follow them to their mountain home."

TABLE XXVII.

SUMMARY OF MEASUREMENTS.

KÂDIR MEN.

	Max.	Min.	Average.
Height	169·4	148·6	157·7
Height, sitting	85·4	70·4	80·3
Height, kneeling	124	109	116·3
Height to gladiolus	126·6	109·2	117·4
Span of arms	184	158·8	168·8
Chest	87·5	74·5	80·5
Middle finger to patella	14·4	6·8	10·7
Shoulders	41·9	36·5	38·8
Cubit	49·1	41·8	45·1
Hand, length	19·5	16·7	17·8
Hand, breadth	8·2	7	7·5
Hips	25·5	22·5	24·1
Foot, length	26·3	21·9	23·8
Foot, breadth	9·1	7·4	8·3
Cephalic length	19·4	17·2	18·4
Cephalic breadth	13·8	12·5	13·4
Cephalic index	80	69·1	72·9
Bigoniac	11	9·1	10
Bizygomatic	13·6	12	12·9
Maxillo-zygomatic index	84·6	70·7	77·4
Nasal height	4·8	3·8	4·3
Nasal breadth	4·5	3·2	3·9
Nasal index	115·4	72·9	89·8

NOTE.—In this and the following tables the measurements are in centimetres.

TABLE XXVIII.

SUMMARY OF MEASUREMENTS.

KĀDIR WOMEN.

	Max.	Min.	Average.
Height	149	133	143
Height, sitting	78·4	69	73·3
Height, kneeling	110·1	98·8	106·2
Span of arms	159	138·8	149·8
Shoulders	36·3	30·6	33·8
Hand, length	16·8	14·7	16·1
Hand, breadth	6·9	5·9	6·6
Foot, length	22·1	19·2	20·8
Foot, breadth	7·6	6·1	7
Cephalic length	18	15·8	17·3
Cephalic breadth	13·4	12·4	12·8
Cephalic index	79·1	71·6	74·2
Bigoniac	10	8·8	9·3
Bizygomatic	12·8	11·4	12
Maxillo-zygomatic index	83·3	72·6	77
Nasal height	4·4	3·2	3·9
Nasal breadth	3·9	3·2	3·4
Nasal index	100	77·3	88

MALAIĀLIS OF THE SALEM DISTRICT.

EXCEPT from a climatic point of view, I have no pleasurable recollections of my sojourn on two occasions among the Malaiālis, who dwell on the summit and slopes of the Shevaroy hills, and earn their living by cultivating grain and working on coffee estates. Suspicious and superstitious to a degree, they openly expressed their fear that I was the dreaded settlement officer, and had come to take possession of their lands in the name of the Government, and transport them, with their wives and families, to the penal settlement in the Andaman Islands. When I was engaged in the innocent occupation of photographing a village, my camera was mistaken for a surveying instrument, and a mild protest raised. Mistaking my motive, they objected strongly to being examined as to their "manners and customs." Many of them, while willing to part with their ornaments of the baser metals, were loth to sell or let me examine their gold and silver jewelry, from fear lest I should use it officially as evidence of their too prosperous condition. Only with great difficulty, and through the kindly assistance of my planter friends, was I enabled to scrape together fifty men for measurement. One man, indeed, told me to my face that he would rather have his throat cut than submit to the measuring operations, and fled precipitately from my bed-room (doing duty as an impromptu research laboratory), which was pervaded with a distinct Malaiāli aroma. The women stolidly refused to entrust themselves in my hands. Nor would they bring their children (unwashed specimens of humanity) to me, lest they should fall sick under the influence of my mild, but to them evil eye. And it was only through the intervention of the Native revenue officer (tāhsildar) that I was enabled to snap the group represented in plate XXXII, just as a thunder-storm burst over the throng collected at the weekly shandy (market).

In the account which follows I am, except as regards physical records, largely indebted to Mr. H. LeFanu's admirable and at times amusing 'Manual of the Salem District,' and to the answers to a series of ethnographic

questions, which had been recently circulated through the Collector of the district.

The word Malaiāli denotes inhabitant of the hills (malai = hill or mountain). The Malaiālis have not, however, like the Todas of the Nilgiris, any claim to be considered as an ancient hill tribe, but are a Tamil-speaking people, who migrated from the plains to the hills in comparatively recent times. As a shrewd, but unscientific observer put it concisely to me, they are Tamils of the plains with the addition of a kambli or blanket; which kambli is a luxury denied to the females, but does duty for males, young and old, in the triple capacity of great coat, waterproof, and blanket. According to tradition, the Malaiālis originally belonged to the Vellāla caste of cultivators, and emigrated from the sacred city of Kānchipūram (Conjeeveram) to the hills about ten generations ago, when Muhammadan rule was dominant in Southern India. When they left Kānchi, they took with them, according to their story, three brothers, of whom the eldest came to the Shevaroy hills, the second to the Kollimallais, and the youngest to the Pachaimallais (green hills), all in the Salem district. The Malaiālis of the Shevaroy hills are called the Peria (big) Malaiālis, those of the Kollimallais the Chinna (little) Malaiālis. According to another version "the Malaiāli deity Karirāman, finding himself uncomfortable at Kānchi, took up a new abode. Three of his followers, named Perianan, Naduvanan, and Chinnan (the eldest the middle-man, and the youngest) started with their families to follow him from Kānchi, and came to the Salem district, where they took different routes, Perianan going to the Shevaroy hills, Naduvanan to the Pachaimallais and Anjūr hills, and Chinnan to Manjavādi."

The Malaiālis of the Shevaroy hills all have Goundan as their second name, which is universally used in hailing them. The first name is sometimes derived from a Hindu deity, and my notes record Mr. Black, Mr. Green, Mr. Little, Mr. Short, Mr. Large, and Mr. Big-nose.

As regards the conditions under which the Malaiālis hold land, I learn from the Manual that, in 1866, the Collector of the Salem district fixed an area around each village for the cultivation of the Malaiālis exclusively, and, in view to prevent aggression on the part of the planters, had the boundaries of these areas surveyed and demarcated. This area is known as the "village green." With this

survey the old system of charging the Malaiālis on ploughs and hoes appears to have been discontinued, and they are now charged at one rupee per acre on the extent of their holdings. The lands within the green are given under the ordinary darakhāst¹ rules to the Malaiālis, but outside it they are sold under the special waste land rules of 1863. In 1870 the Board of Revenue decided that, where the lands within the green are all occupied, and the Malaiālis require more land for cultivation, land outside the limits of the green may be given them under the ordinary darakhāst rules. In 1871 it was discovered that the planters tried to get lands outside the green by making the Malaiālis first apply for it, thereby evading the waste land rules. The Board then ordered that, if there was reason to suspect that a Malaiāli was applying for lands outside the green on account of the planters, the patta (deed of lease) might be refused.

Subscribing vaguely to the Hindu religion, the Malaiālis, who believe that their progenitors wore the sacred thread, give a nominal allegiance to both Siva and Vishnu, as well as to a number of minor deities, and believe in the efficacy of a thread to ward off sickness and attacks by devils or evil spirits. "In the year 1852," Mr. LeFanu writes, "a searching enquiry into the traditions, customs, and origin of these Malaiālis was made, and probably nothing more is to be ascertained. They then stated that 'smearing the face with ashes indicates the religion of Shiva, and putting nāmam that of Vishnu, but that there is no difference between the two religions; that, though Sivarātri sacred to Shiva, and Strirāmanavāmi and Gokālashtami sacred to Vishnu, appear outwardly to denote a difference, there is really none.' Though they observe the Saturdays of the month Peratāsi sacred to Vishnu, still worship is performed without reference to Vishnu or Shiva. They have, indeed, certain observances, which would seem to point to a division into Vaishnavas and Saivas, the existence of which they deny; as for instance, some, out of respect to Shiva, abstain from sexual intercourse on Sundays and Mondays; and others, for the sake of Vishnu, do the same on Fridays and Saturdays. So, too, offerings are made to Vishnu on Fridays and Saturdays, and to Shiva on

¹ Darakhāst: application for land for purposes of cultivation; or bid at an auction.



GROUP OF MALAIALIS.

Sundays and Mondays; but they denied the existence of sects among them."

In April, 1896, I paid a visit to the picturesquely-situated village of Kiliūr, not far distant from the town of Yercaud, on the occasion of a religious festival. The villagers were discovered, early in the morning, painting pseudo-sect-marks on their foreheads with blue and pink coal-tar dyes, with the assistance of hand looking-glasses of European manufacture purchased at the weekly market, and decorating their turbans and ears with the leafy stems of *Artemisia austriaca*, var. *orientalis*, and hedge-roses. The scene of the ceremonial was in a neighbouring sacred grove of lofty forest trees, wherein were two hut temples, of which one contained images of the goddess Draupādi and eight minor deities, the other images of Perumāl and his wife. All the gods and goddesses were represented by human figures of brass and clay. Two processional cars were gaily decorated with plantain leaves and flags, some made in Germany. As the villagers arrived, they prostrated themselves before the temples, and whiled away the time, till the serious business of the day began, in gossiping with their friends, and partaking of light refreshment purchased from the fruit and sweet-meat sellers, who were doing a brisk trade. At 10 A.M. the proceedings were enlivened by a band of music, which played at intervals throughout the performance, and the gods were decorated with flowers and jewelry. An hour later, pūja (worship) was done to the stone image of the god Vignaswaram, in the form of a human figure, within a small shrine built of slabs of rock. Before this idol cooked rice was offered, and camphor burnt. Then plantain stems, with leaves, were tied to a tree in the vicinity of the temples, and cooked rice and cocoanuts placed beneath the tree. A man holding a sword, issued forth, and, in unison with the collected assemblage, screamed out "Govinda, Govinda" (the name of their god). The plantain stems were next removed from the tree, carried in procession with musical honours, and placed before the threshold of one of the temples. Then some men appeared on the scene to the cry of "Govinda," bearing in one hand a light, and ringing a bell held in the other. Holy water was sprinkled over the plantain stems, and pūja done to the god Perumāl by offering sāmai (grain) and burning camphor. Outside one of the temples a cloth was spread on

the ground, and the images of Draupādi and the eight minor deities placed thereon. From the other temple Perumāl and his wife were brought forth in state, and placed on the two cars. A yellow powder was distributed among the crowd, and smeared over the face. A cocoanut was broken, and camphor burnt before Perumāl. Then all the gods, followed by the spectators, were carried in procession round the grove, and a man, becoming inspired and seized with a fine religious frenzy, waved a sword wildly around him, but with due respect for his own bodily safety, and pointed it in a threatening manner at the crowd. Asked, as an oracle, whether the omens were propitious to the village, he gave vent to the oracular (and true) response that for three years there would be a scarcity of rain, and that there would be famine in the land, and consequent suffering. This performance concluded, a bamboo pole was erected, bearing a pulley at the top, with which cocoanuts and plantains were connected by a string. By means of this string the fruits were alternately raised and lowered, and men, armed with sticks, tried to hit them, while turmeric water was dashed in their faces just as they were on the point of striking. The fruits, being at last successfully hit, were received as a prize by the winner. The gods were then taken back to their temples, and three men, overcome by a mock convulsive seizure, were brought to their senses by stripes on the back administered with a rope by the pujāri (officiating priest). A sheep being produced, mantrams (prayers) were recited over it. The pujāri, going to a pool close by, bathed, and smeared turmeric powder over his face. A pretence was made to cut the sheep's throat, and blood drawn with a knife. The pujāri, after sucking the blood, returned to the pool and indulged in a ceremonial ablution, while the unhappy sheep was escorted to the village, and eventually eaten at a banquet by the villagers and their guests.

To Mr. W. Mahon Daly I am indebted for the following account of a Malaiāli bull dance, at which he was present as an eye witness. "It is the custom on the Shevaroy hills, as well as in the plains, to have a bull dance after the pongul festival, and I had the pleasure of witnessing one in a Malaiāli village. It was held in an open enclosure called the munthay. This piece of land adjoins the village, and faces the Mariamma (goddess of small-pox) shrine, and is the place of resort on festive occasions. The village panchāyats (councils), marriages, and other ceremonies are

held here. On our arrival, we were courteously invited to sit under a wide spreading fig-tree. The bull dance would literally mean a bull dancing, but I give the translation of the Tamil 'yerothoo-attum', the word attum meaning dance. This is a sport which is much in vogue among the Malaiālis, and is celebrated with much éclat immediately after pongul, this being the principal festival observed by them. No doubt they have received the custom from those in the plains. A shooting excursion follows as the next sport, and, if they be so fortunate as to hunt down a wild boar or deer, or any big game, a second bull dance is got up.

"We were just in time to see the tamāsha (spectacle). The munthay was becoming crowded, a regular influx of spectators, mostly women arrayed in their best cloths, coming in from the neighbouring villages. These were marshalled in a circle round the munthay, all standing. I was told that they were not invited, but that it was customary for them to pour in of their own accord when any sports or ceremonial took place in a village; and the inhabitants of the particular village were prepared to expect a large company, whom they fed on such occasions. After the company had collected, drums were beaten, and the long brass bugles were blown; and, just at this juncture, we saw an elderly Malaiāli bring from his hut a coil of rope made of leather, and hand it over to the pujāri or priest in charge of the temple. The latter placed it in front of the shrine, worshipped it thrice, some of the villagers following suit, and, after offering incense, delivered it to a few respectable village men, who in turn made it over to a lot of Malaiāli men, whose business it was to attach it to the bulls. This rope the oldest inhabitant of the village had the right to keep. The bulls had been previously selected, and penned alongside of the munthay, from which they were brought one by one, and tied with the rope, leaving an equal length on either side. The rope being fixed on, the bull was brought to the munthay, held on both sides by any number who were willing, or as many as the rope would permit. More than fifteen on either side held on to a bull, which was far too many, for the animal had not the slightest chance of making a dart or plunge at the man in front, who was trying to provoke it by using a long bamboo with a skin attached to the end. When the bull was timid, and avoided his persecutors, he was hissed and hooted by those behind, and, if these modes of provocation failed to rouse

his anger, he was simply dragged to and fro by main force, and let loose when his strength was almost exhausted. A dozen or more bulls are taken up and down the munthay, and the tamāsha is over. When the munthay happens to have a slope, the Malaiālis have very little control over the bull, and, in some instances, I have seen them actually dragged headlong to the ground at the expense of a few damaged heads. The spectators, and all the estate coolies who were present, were fed that night, and slept in the village.

“ If a death occurs in the village a few days before the festival, I am told that the dance is postponed for a week. This certainly, as far as I know, is not the custom in the plains. ”

A very tame affair is this bull dance, when compared with the buffalo ‘ drive ’ at a Toda funeral², or the bull baiting (jellikattu) practised chiefly by the Maravan and kindred castes, which is thus graphically described by Mr. J. H. Nelson:³ “ This is a game worthy of a bold and free people, and it is to be regretted that certain Collectors should have discouraged it under the idea that it was somewhat dangerous. The jellikattu is conducted in the following manner:—On a certain day large crowds of people, chiefly males, assemble together in the morning in some extensive open place, the dry bed of a river perhaps, or of a tank (pond), and many of them may be seen leading ploughing bullocks, of which the sleek bodies, and rather wicked eyes, afford clear evidence of the extra diet they have received for some days in anticipation of the great event. The owners of these animals soon begin to brag of their strength and speed, and to challenge all and any to catch and hold them: and in a short time one of the beasts is selected to open the day’s proceedings. A new cloth is made fast round his horns, to be the prize of his captor, and he is then led out into the middle of the arena by his owner, and there left to himself, surrounded by a throng of shouting and excited strangers. Unaccustomed to this sort of treatment, and excited by the gestures of those who have undertaken to catch him, the bullock usually lowers his head at once, and charges wildly into the midst of the crowd, who nimbly run off on either side to make way for him. His

² *Vile Bull.* No. IV, 1896.

³ ‘ *Manual of the Madura District,* ’ 1868.

speed being much greater than that of the men, he soon overtakes one of his enemies and savagely makes at him, to toss him. Upon this the man drops on the sand like a stone, and the bullock, instead of goring him, leaps over his body, and rushes after another. The second man drops in his turn, and is passed like the first; and, after repeating this operation several times, the beast either succeeds in breaking the ring and galloping off to his village, charging every person he meets on the way, or is at last caught, and held by the most vigorous of his pursuers. Strange as it may seem, the bullocks never by any chance toss or gore any one who throws himself down on their approach; and the only danger arises from their accidentally reaching, unseen and unheard, some one who remains standing.

“After the first two or three animals have been let loose one after the other, two or three, or even half a dozen, are let loose at a time, and the scene becomes wildly exciting. The crowd sways violently to and fro in various directions in frantic efforts to escape being knocked over; the air is filled with shouts, screams and laughter, and the bullocks thunder over the plain as fiercely as if blood and slaughter were their sole occupation. In this way perhaps two or three hundred animals are run in the course of the day; and, when all go home towards evening, a few cuts and bruises, borne with the utmost cheerfulness, are the only evil results of an amusement which requires great courage and agility on the part of the competitors for the prizes—that is for the cloths and other things tied to the bullocks’ horns—and not a little on the part of the mere by-standers. The only time I saw this sport (from a place of safety) I was highly delighted with the entertainment, and no accident occurred to mar my pleasure. One man, indeed, was slightly wounded in the buttock: but he was quite able to walk, and seemed to be as happy as his friend.”

To return to the Malaiālis. The man of highest rank is the guru, who is invited to settle disputes in villages, to which he comes, on pony-back or on foot, with an umbrella over him, and accompanied by music. The office of guru is hereditary, and, when he dies, his son succeeds him, unless he is a minor, in which case the brother of the deceased man steps into his shoes. If, in sweeping the hut, the broom touches any one, or when a Malaiāli has been kicked by a European or released from prison, he must be

received back into his caste. For this purpose he goes to the guru, who takes him to the temple, where a screen is put up between the guru and the applicant for restoration of caste privileges. Holy water is dedicated to the swāmi (God) by the guru, and a portion thereof drunk by the man, who prostrates himself before the guru, and subsequently gives a feast of pork, mutton, and other delicacies. The Malaiālis, it may be noted, will eat sheep, pigs, fowls, various birds, and black monkeys.

Each village has its own headman, an honorary appointment, carrying with it the privilege of an extra share of the good things, when a feast is being held. A kangāni is appointed to do duty under the headman, and receives annually from every hut two ballams of grain. When disputes occur, *e.g.*, between two brothers regarding a woman or partition of property, the headman summons a panchāyat (village council), which has the power to inflict fines in money, sheep, etc., according to the gravity of the offence. For every group of ten villages there is a pattakāram (head of a division), who is expected to attend on the occasion of marriages and car festivals. A bridegroom has to give him eight days before his marriage a rupee, a packet of betel-nut, and half a measure of nuts. Serving under the pattakāram is the mānia keeran, whose duty it is to give notice of a marriage to the ten villagers, and to summon the villagers thereto. Among the Peria Malaiālis weddings take place on Wednesday and Thursday in the month Chittaray (April-May). For eight days before the ceremony, bride and bridegroom must anoint themselves with turmeric paste.

In the auspicious month of April, 1898, on the receipt of news of a wedding in a distant village, I proceeded thither through coffee estates rich with white flowers bursting into blossom under the grateful influence of copious thunder-showers. *En route*, a good view was obtained of the "Golden Horn," an overhanging rock with a drop of 1,000 feet, down which the Malaiālis swing themselves in search for honey. On the track through the jungle a rock, known from the fancied resemblance of the holes produced by weathering to hoof-marks, as the kudre panji (horse's foot-prints), was passed. Concerning this rock the legend runs that a horse jumped on to it at one leap from the top of the Shivarāyan hill, and at the next leap into the plains at the foot of the hills. The village, which was to be the

scene of the festivities, was, like other Malaiāli villages, made up of detached bee-hive huts of bamboo, thatched with palm-leaves and grass, and containing a central room surrounded by a verandah,—the home of pigs, goats, and fowls. Other huts, of similar bee-hive shape, but smaller, were used as store-houses for the grain collected at the harvest season. These grain-stores have no entrance, and the thatched roof has to be removed to take out the grain for use. Tiled roofs, such as are common in the Badaga villages on the Nilgiris, are forbidden, as their use would be an innovation, which would excite the anger of the Malaiāli gods. Huts built on piles contain the flocks, which, during the day, are herded in pens that are removable, and, by moving these pens from one place to another, the villagers manage to get the different parts of their fields manured. Round the whole village a low wall usually runs, and, close by, are the coffee, tobacco, and other cultivated crops. Outside the village, beneath a lofty tree, was a small stone shrine, capped with a stone slab, wherein were stacked a number of neolithic celts, which the Malaiālis reverence as thunder-bolts fallen from heaven. On my arrival at the village, I learned that the bride was not expected to arrive from her own village till long after dark. “She has,” said the headman, “a stomach, which must be fed before she comes here.” I was, however, presented to the youthful and anxious bridegroom, who was already dressed up in his marriage finery, and stripped before the assembled villagers, in order that I might record his wedding garments. His entire body was enshrouded in a new Salem cotton cloth with silk-woven border, and a clean white turban and coloured cotton langūti completed the clothing. For jewelry he wore gold ornaments in each helix, and a marriage hoop ornament of gold encircling each ear, a heavy silver necklet, five rows of silver armlets on the right upper arm, and a silver chain round his hips. Fingers and toes were decorated with silver rings. The neck was smeared with chunam (lime), and the chest and abdomen daubed with symbolical marks in turmeric. Unfortunately, the arrival of a case of cholera in the village gave rise to a hitch in the proceedings, and I had to rely on native evidence for details of the marriage ceremonial. On the first day, the bridegroom, accompanied by his relations, takes the modest dowry of grain and money (usually five rupees) to the bride’s village, and arranges for the performance of the nalungoo ceremony on the following

day. If the bride and bridegroom belong to the same village, this ceremony is performed by the pair seated on a cot. Otherwise it is performed by each separately. The elders of the village take a few drops of castor-oil, and rub it into the heads of the bride and bridegroom ; afterwards washing the oil off with poonac and alum water. One of the elders then dips betel-leaves and arugum-pillu (*Cynodon Dactylon*) in milk, and with them describe a circle round the heads of the young couple, who do obeisance by bowing their heads. The proceedings wind up with a feast of pork and other luxuries. On the following day the ceremony of tying the tāli (marriage emblem) round the bride's neck is performed. The bride, escorted by her party, comes to the bridegroom's village, and remains outside it, while the bridegroom brings a light, a new mat, and three bundles of betel-nut and half a measure of nuts, which are distributed among the crowd. The happy pair then enter the village, accompanied by music. Beneath a pandal there is a stone, representing the god, marked with the nāmam, and decorated with burning lamps and painted earthen pots. Before this stone the bride and bridegroom seat themselves in the presence of the guru, who is seated on a raised dais. Flowers are distributed among the wedding guests, and the tāli, made of gold, is tied round the bride's neck. This done, the feet of both bride and bridegroom are washed with alum water, and presents of small coin received. The contracting parties then walk three times round the stone, before which they prostrate themselves, and receive the blessing of the assembled elders. The ceremony concluded, they go round the village, riding on the same pony. The proceedings again terminate with a feast. I gather that the bride lives apart from her husband for eleven or fifteen days, during which time he is permitted to visit her at meal times, with the object, as my interpreter expressed it, of " finding out if the bride loves her husband or not. If she does not love him, she is advised by the guru and head man to do so, because there are many cases in which the girls, after marriage, if they are matured, go away with other Malaiālis. If this matter comes to the notice of the guru, she says that she does not like to live with him. After enquiry, the husband is permitted to marry another girl."

A curious custom prevailing among the Malaiālis of the Kollimallais, and illustrating the Hindu love of offspring, is thus referred to by Mr. LeFanu : " The sons, when mere

children, are married to mature females, and the father-in-law of the bride assumes the performance of the procreative function, thus assuring for himself and his son a descendant to take them out of 'Put.' When the putative father comes of age, and in their turn his wife's male offspring are married, he performs for them the same office which his father did for him. Thus, not only is the religious idea involved in the words *Putra* and *Kumāran*⁴ carried out, but also the premature strain on the generative faculties, which this tradition entails, is avoided. The accommodation is reciprocal, and there is something on physiological grounds to recommend it." Concerning this custom the Rev. H. N. Hutchinson writes as follows:⁵ "A man who has young sons, mere children, takes new wives for himself, who are, however, called his sons' wives, and the children they bear to him are called his sons' children, and so it goes on from one generation to another. This appears to be a relic of what is called the matriarchal system, which still prevails in various countries, as once in India." Widow re-marriage among the *Peria Malaiālis* is, I am informed, forbidden, though widows are permitted to contract irregular alliances. But, writing concerning the *Malaiālis* of the *Dharmapuri* taluk (division) of the Salem district, Mr. LeFanu states that: "It is almost imperative on a widow to marry again. Even at eighty years of age, a widow is not exempted from this rule, which nothing but the most persistent obstinacy on her part can evade. It is said that, in case a widow be not re-married at once, the *Pattakār* sends for her to his own house, to avoid which the women consent to re-enter the state of bondage." Of the marriage customs of the *Malaiālis* of the *Javādi* hills the same author writes that "these hills are inhabited by *Malaiālis*, who style themselves *Vellālars* and *Pachai Vellālars*, the latter being distinguished by the fact that their females are not allowed to tattoo themselves, or tie their hair in the knot called 'kondai'. The two classes do not intermarry. In their marriage ceremonies they dispense with the service of a

⁴ *Putra* means literally "one who saves from put," a hell into which those who have not produced a son fall. Hindus believe that a son can, by the performance of certain rites and ceremonies, save the souls of his ancestors from this place of torture. Hence the anxiety of every Hindu to get married, and beget male offspring. *Kumāran* is the second stage in the life of an individual, which is divided into infancy, childhood, manhood, and old age.

⁵ 'Marriage Customs in many Lands,' 1897.

Brāhman. Monday is the day chosen for the commencement of the ceremony, and the tāli is tied on the following Friday, the only essential being that the Monday and Friday concerned must not follow new moon days. They are indifferent about choosing a 'lakkinam' (muhūrtham or auspicious day) for the commencement of the marriage, or for tying the tāli. Widows are allowed to re-marry. When a virgin or a widow has to be married, the selection of a husband is not left to the woman concerned, or to her parents. It is the duty of the Ūrgoundan to inquire what marriageable women there may be in the village, and then to summon the pāttan, or headman of the caste, to the spot. The latter, on his arrival, convenes a panchāyat of the residents, and, with their assistance, selects a bridegroom. The parents of the happy couple then fix the wedding day, and the ceremony is performed accordingly. The marriage of a virgin is called 'kaliānam' or 'marriage proper'; that of a widow being styled 'kattigiradu' or 'tying' (*cf.* Anglice noose, nuptial knot). Adultery is regarded with different degrees of disfavour according to the social position of the co-respondents. If a married woman, virgin or widow, commits adultery with a man of another caste, or if a male Vellālan commits adultery with a woman of another caste, the penalty is expulsion from caste. Where, however, the paramour belongs to the Vellāla caste, a caste panchāyat is held, and the woman is fined Rs. 3-8-9, and the man Rs. 7. After the imposition of the fine, Brāhman supremacy is recognised, the guru having the privilege of administering the 'tirtam', or holy water, to the culprits for their purification. For the performance of this rite his fee varies from 4 annas to 12 rupees. The tirtam may either be administered by the guru in person, or may be sent by him to the nattan for the purpose. The fine imposed on the offenders is payable by their relatives, however distant; and, if there be no relatives, then the offenders are transported from their village to a foreign country. Where the adulteress is a married woman, she is permitted to return to her husband, taking any issue she may have had by her paramour. In special cases a widow is permitted to marry her deceased husband's brother. Should a widow re-marry, her issue by her former husband belongs to his relatives, and are not transferable to the second husband. The same rule holds good in successive re-marriages. Where there may be no relatives of the deceased husband forthcoming to

take charge of the children, the duty of caring for them devolves on the Ūrgoundan, who is bound to receive and protect them. The Vellālars generally bury their dead, except in cases where a woman quick with child, or a man afflicted with leprosy has died, the bodies in these cases being burnt. No ceremony is performed at child-birth; but the little stranger receives a name on the fifteenth day. When a girl attains puberty, she is relegated for a month to a hut outside the village, where her food is brought to her during that period, and she is forbidden to leave the hut either day or night. The same menstrual and death customs are observed by the Peria Malaiālis, who bury their dead in the equivalent of a cemetery, and mark the site by a mound of earth and stones. At the time of the funeral, guns are discharged by a "firing party," and, at the grave, handfulls of earth are, as at a Christian burial service, thrown over the corpse.

The Malaiālis of the Shevaroy hills snare with nets, and shoot big game—deer, leopards, tigers, bears, and pigs—with guns of European manufacture; and Mr. LeFanu narrates that, during the pongal feast, all the Malaiālis of the Kalrāyans go ahunting, or, as they term it, for 'par vēttai.' "Should the Pālaiagar fail to bring something down, usage requires that the pujāri should deprive him of his kudimi or top-knot. He generally begs himself off the personal degradation, and a servant undergoes the operation in his stead."

In games the Malaiālis seem to be deficient, and, despite the manual labour which work on coffee estates and their own lands imposes on them, they are wanting in muscular development. "How", said the possessor of a miserable hand-grip of 48 lbs. in reply to a question, "can any of us be strong, when we have to work all day for the European"? A rough-and-tumble game, resembling prisoner's base, called sathurappāri vilayāttu, is played in a square court, of which the lines are marked by means of the feet in the dust, with water on moonlight nights, or with chunām (lime wash) in mimicry of the lines of a lawn-tennis court. The players, eight in number, divide into an in and out side. The square is defended at the corners by the former, while the latter try to force their way within the lines.

The finest specimen of a Peria Malalāli, which I have seen, was a man, aged 25, named Dāsan Goundan, working on a coffee estate, whose record was as follows :—

			Malaiāli. average.
Weight	..	157 lbs.	99 lbs.
Height	..	173·2 cm.	163·4 cm.
Span of arms	..	179·8 „	172·1 „
Chest	..	93·5 „	79·7 „
Shoulders	..	42·6 „	38·5 „
Hips	..	27 „	35·5 „
Foot, length	..	26·7 „	25·3 „

The leading characteristics of the Malaiālis, and their personal adornment are summed up in the following cases :—

1. Man, æt. 25. A lean and long-legged individual with very thin calves. Height 164 cm. Hair of head clipped short on top, long and tied in a knot behind. Diffuse hairs over middle of chest. Median strip of hairs on abdomen. Clothing consists of white turban decorated with roses, brown kambli (blanket) with white border pattern, dhūti and langūti. Bag containing betel-leaf and tobacco slung over left shoulder. Carries bill-hook and gourd water-vessel. Coffee walking stick. Silver belt round loins. Brass ring in lobe of each ear and gold ornament in left helix. Silver bangle on each wrist. Two silver rings on right ring and little fingers. Silver ring on such second toe.

2. Man, æt. 30. Will not sit on a chair to have his head measured, as it would be disrespectful, and make his god angry. No objection to standing upon it. Hair extensively developed over chest, abdomen, shoulders, back and extensor surface of fore-arms. Silver belt round loins. Silver armlet on right upper arm, and bangle on each wrist. Three silver rings on right ring finger. Two silver rings on right little finger. Silver ring on each second toe. Stores his money away in the hollow bamboos of his hut.

3. Man, æt. 25. Brass ring in left nostril. Four brass rings in right ear lobe ; two in left. Two silver rings on right third finger.

4. Man, æt. 28. Caste spots on forehead and root of nose, painted with coal-tar magenta dyes. Smeared with

chunām (lime) over both deltoids, chest and neck. Mutton-chop whiskers and billy-goat beard.

5. Man, æt. 30. Woollen anklet round left ankle, worn as a charm to drive away pain.

6. Man, æt. 26. Wooden plug in lobe and helix of each ear.

7. Man, æt. 26. Blue sect spot on forehead and blue line in mid-frontal region. Wooden plug in lobe of each ear. Gold ornament in left helix. Silver bangle on right wrist. Two silver rings on right ring and little fingers. Two brass rings on left little finger. Silver ring on left second toe.

Little girl. Gold ornament in right nostril. Silver and bead necklets. Tattooed (blue) with mark like masonic compasses on forehead, circle surrounded by ring of dots on right cheek, sun and half moon on left cheek, spot on chin, and unknown symbols outside orbits. Tattooing is done by Korava women, who come on circuit from the plains about once a month. The devices on the face constitute distinctive tribal marks. Gold ornament in right nostril. Silver and bead necklets. Two leaden bangles on right wrist, and a single leaden bangle on left wrist. Two silver rings on left fore-finger. Two brass rings on left second finger.

Woman, æt. 35. Tattooed with the same symbols as the preceding on forehead and outside orbits. Sun and half moon on right cheek. Rayed circle on left cheek. Scorpion on metacarpus of right thumb. Elaborate geometrical and conventional devices, as among women of the plains, over right deltoid, both fore-arms, and back of left hand. Gold ornament in each ear lobe, and in helix, the latter connected with a silver link chain fixed into back hair, which is tied in a bunch. Gold ring in right nostril, and gold ornament in left nostril. Gold tāli tied with string round neck. Silver and bead necklets with tooth-pick and ear-scoop pendent. Two silver armlets on right upper arm. Leaden bangle on right wrist. One leaden, and two composition bangles on left wrist. Silver ring on each second toe. Sári (dress) made of florid imported printed cotton. Smokes tobacco of local cultivation, wrapped in a leaf of *Gmelina arborea*.

The averages of my Malaiāli measurements are, in Table XXX, compared with those of two of the Tamil classes of Madras City (Vellālas and Pallis) and support the theory that the Malaiālis emigrated from the Tamil-speaking area of the plains at no very remote period.

TABLE XXIX.

SUMMARY OF MEASUREMENTS.

MALAIĀLIS. 50.

	Max.	Min.	Average.
Weight	120	87	99
Height	173·2	153·2	163·4
Height, sitting	87·2	77·1	82
Height, kneeling	125·7	111·4	120
Height to gladiolus	131	112·8	122·7
Span of arms	188·6	161	172·1
Chest	90	74	79·7
Middle finger to patella	14·8	6·4	10·8
Shoulders	43·2	35·1	38·5
Cubit	50·2	43·1	46·6
Hand, length	19·6	16	17·8
Hand, breadth	9·1	7·4	8·1
Hips	27·2	23·6	25·5
Foot, length	26·9	23·1	25·3
Foot, breadth	10·1	8·1	8·8
Cephalic length	19·3	16·9	18·3
Cephalic breadth	14·6	12·8	13·6
Cephalic index	82·8	61	74·3
Bigoniac	10·8	8·2	9·6
Bizygomatic	13·9	11·7	12·7
Maxillo-zygomatic index	85·2	65·6	75·8
Nasal height	5·2	3·9	4·6
Nasal breadth	4·1	3	3·5
Nasal index	100	63·8	77·8

TABLE XXX.

SUMMARY OF MEASUREMENTS OF MALAIĀLIS,
VELLĀLAS, AND PALLIS.

	Vellālas.	Malaiālis.	Pallis.
Weight	103·3	99	104·6
Height	162·4	163·4	162·5
Height, sitting	83·4	82·1	83·6
Height, kneeling	119·3	120	118·8
Height to gladiolus	121·9	122·8	121·5
Span of arms	174·1	172·1	172·6
Chest	79·8	79·7	79·2
Middle finger to patella ...	10·4	10·8	9·5
Shoulders	39·7	38·5	39·4
Cubit	46·9	46·6	46·2
Hand, length	18·3	17·8	17·9
Hand, breadth	8·2	8·1	8·1
Hips	25·6	25·5	25·5
Foot, length	25·7	25·3	25·5
Foot, breadth	8·7	8·8	8·9
Cephalic length	18·6	18·3	18·6
Cephalic breadth	13·8	13·6	13·6
Cephalic index	74·1	74·3	73
Bigoniao	10	9·6	9·9
Bizygomatic	12·9	12·7	12·7
Maxillo-zygomatic index ...	76·7	75·8	78
Nasal height	4·7	4·6	4·6
Nasal breadth	3·4	3·5	3·6
Nasal index	73·1	77·8	77·9

SYLLABUS OF A COURSE OF DEMONSTRATIONS ON PRACTICAL ANTHROPOLOGY GIVEN AT THE MUSEUM, OCTOBER 1898.

DEMONSTRATIONS primarily for the benefit of students in the University classes of History, which, as laid down by the local University, includes some knowledge of ethnology and comparative philology. No facilities for practical instruction at the colleges. Questions in examination papers, bearing on the cephalic index and body measurements, which cannot be answered in a style worthy of Degree examination by candidates who have not seen practical application of methods on skull and living subject. Demonstrations, practical and semi-popular, to supplement theoretical knowledge acquired from books and lectures.

Anthropology, a branch of natural history, which treats of Man and the races of Man, conveniently separated into two main divisions :—

(a) Ethnography, which deals with man as a social and intellectual being, his “manners and customs,” knowledge of arts and industries, tradition, language, religion, etc.

Illustrations. Show-cases of tribal jewelry, models of dwelling-huts, implements, and photographs. Meriah sacrifice (buffaloes sacrificed at present day instead of human beings). Toda polyandry and female infanticide. Hook-swinging. Dravidian languages. Animistic religion of hill and forest tribes. Burial and cremation. Decline of indigenous weaving industry, and degeneration in Native female dress as result of imported colour-printed piece-goods.

(b) Anthropography, which deals with Man and the varieties or “species” of the human family from an animal point of view, his structure and the functions of his body.

Necessary for the purposes of study of anthropology, so far as Indian peninsula is concerned, to keep in mind three primary links of evidence :—

(a) Evidence of “prehistoric” people, bearing in mind that, like the geologist, the anthropologist does not reckon by days or years; and that “the 6,000 years (Creation said to

have occurred 4004 B.C.) which were till lately looked on as the sum of the world's age are to him but as a unit of measurement in the long succession of past ages." Pre-historic man in Southern India very largely represented by tumuli, cairns, cromlechs and kistvaens of Shevaroy, Palni, and Nilgiri mountain ranges; by the large earthenware burial urns or sarcophagi found at Pallāvaram near Madras, in the Tinnevelly district, etc.; and by the palæolithic and neolithic implements (celts, hammer-stones, scrapers, saws, etc.), concerning which Mr. R. Bruce Foote is preparing a catalogue raisonné based on his own and the museum collections.

Illustrations. Quartzite implements found in lateritic formation at Pallāvaram; stone implements from the Bellary district and Shevaroy hills, stored by Natives in small shrines, and worshipped as thunderbolts fallen from heaven; earthenware sarcophagus, 105 cm. high, from Tinnevelly; earthenware vessels impressed with rude ornamentation. Models of large-horned buffaloes, birds, fabulous animals, and bearded men on horseback, bronze vessels, and iron arrow or javelin heads, excavated on the Nilgiri hills. Evidence that Nilgiris were inhabited by a people earlier than the Todas, who possess not even the most elementary knowledge of arts and industries. Todas live on products of semi-feral buffalo, and by soliciting alms (inám) from European visitors to their mandas. Pottery and human bones (heads and necks of femora) from Coimbatore district; pottery and chank shells (*Turbinella rapa*) from Guntakal.

(b) Evidence of oldest existing people, now confined to jungle tribes dispersed in small communities, for the most part in the jungles on the slopes of the mountains.

Examples: Irulas, Kurumbas, Kādirs, Paniyans, and Sholigas, all possessing two marked characters in common, viz. (a) shortness of stature; (b) short, broad nose with consequent high nasal index. "Aryans so impressed with the flat, snub noses of their enemies, that they often spoke of them as the noseless ones" (Risley).

				Average height.	Average nasal index.
				CM.	CM.
Paniyans	..	..	..	157.4	95.1
Kādirs	..	..	..	157.7	89.8
Kurumbas	..	..	..	157.4	89.6
Irulas	..	..	..	159.8	84.9

(c) Evidence of influence of immigration of foreign races, *e.g.*, 'Aryans,' whose influence may, *mutatis mutandis*, be argued by analogy with influence of European immigration (Portuguese, Dutch, British, French, and Danish) on indigenous population of Southern India during last five centuries, with, as starting point, alliances between Portuguese adventurers under Albuquerque with Native women of Malabar.

Important division of anthropography is anthropometry, *i.e.*, measurement and estimation of physical data relating to people belonging to different races, castes and tribes, by means of which their characteristics can be compared together. Anthropometry for purposes of criminal identification. Bertillonage. Measurements, to be relied on, must be taken by experts. Fingerprint records more reliable for criminal purposes.

As a means of gauging physique, three pieces of apparatus used in museum laboratory, viz., weighing machine, dynamometer, spirometer.

(a) Weighing machine. Record actual weight, and weight relatively to uniform stature of 100 cm. for purpose of comparison of different castes and tribes.

Examples :

				Average height.	Average weight.	Average weight relative to stature = 100.
				CM.	LBS.	LBS.
Brāhmans	(poorer	162·5	115	70·8		
classes).						
Pariahs	.. ..	162·1	106	65·4		
Pallis	.. ..	162·5	104·6	64·4		
Kammālans	.. ..	159·7	100·4	62·9		

European inhabitants of a hill station objected to my weighing local tribesmen in meat scales of butcher's shop.

(b) Spirometer, or gasometer, which records play of chest or vital capacity, *i.e.*, total quantity of air, which can be given out by the most forcible expiration following on a most forcible inspiration. Play of chest of far greater importance than actual girth, as every one knows who has had to examine recruits or applicants for life-insurance. No use possessing a 40-inch chest if lungs emphysematous, and chest walls have not corresponding power of expansion and contraction.

(c) Hand-dynamometer for testing hand grip.

Examples :

	Average.
	LBS.
Europeans, Madras City	88
Sepoys, 28th Madras Infantry	80
Todas	79
Kotas	70
Eurasians (poorer classes), Madras City ..	65

Note that Todas, who do no manual labour, have a greater average grip than the Kotas of the Nilgiris, many of whom are blacksmiths or carpenters. Maximum recorded in Madras 113 lbs., Native musketry instructor 28th M.I.

Results of anthropometry depend essentially on calculation of averages. In small communities, *e.g.*, jungle-tribes, measurement of 20 to 25 subjects sufficient for all practical purposes. In larger communities, measurement of 40 subjects yields sufficiently accurate results. Necessary, when investigating Eurasians, to measure over a hundred individuals owing to great variation in stature and other characters. Women, as well as men, should be measured if possible. Not always easy to establish confidence among them. Two-anna pieces most effective means of conciliation, supplemented by cheroots for men, cigarettes for children, and, as a last resource, alcohol. Measuring appliances sometimes frighten the subjects, especially goniometer for determining facial angle, which is mistaken for an instrument of torture.

Before measuring individual, record notes on personal characteristics, ornaments, dress, etc.

(a) Name. May be derived from a god or goddess, personal characteristic, a colour, etc. Natives have equivalent of Mr. Black, Green, Short, Large, and further Mr. Big-nose, Mr. Brownish-black, and Mr. Greenish-blue.

(b) Age. Difficult to estimate accurately in uneducated classes, as, after childhood, they lose all count of age. In taking measurements of Europeans, limits of age 25 to 40. Useless to record measurements of individuals not fully developed, or of those who have begun to shrink from age. In dealing with Natives, I accept 40 as maximum and 20 as minimum. Development earlier in the east than in Europe.

(c) Skin-colour. Fair, as in high-caste Brāhmans, dark-brown, or even blackish-brown in some jungle-tribes, notably Irulas of Nilgiris, who are so dark that it has been

jestingly said, charcoal leaves a white mark on them. Skin-colour can be roughly described according to number on Broca's colour scale. Typical Dravidian brown colour not represented therein.

(d) 'Tattooing. Originally resorted to as ornament, and as a means of sexual attraction. In Samoa, for example, until a young man is tattooed, he cannot think of marriage. Tattooing in blue performed even on dark skins, on which blue is invisible, and original object of the practice lost. In South India tattooing conspicuously absent on west coast. In other parts pattern ranges from simple devices of dots, lines, and circles among women of hill-tribes to elaborate geometrical and conventional devices among women of the plains. Prevalence of religious symbols (chalice, dove, crucifix, sacred heart, etc.) among Eurasians of west coast. Most elaborate patterns executed by Burmese professional tattooers on Tamil emigrants to Burma.

(e) Malformations. Refer to pinched in feet of Chinese women, compression of infant skull among Peruvians, and effects of tight-lacing. Contrast Native female and European waists, undistorted foot of Native, and foot of European distorted by badly-fitting boots. In latter long axis of great toe not parallel to central axis of foot as in Natives.

Most characteristic malformations in Southern India :—

1. Circumcision, a Muhammadan practice, but, curiously enough, resorted to by Kallans of Madura district, and said to be survival of forcible conversion to Muhammadanism.

2. Dilatation of lobes of ears, which become, from stretching, as elastic as india-rubber, and sometimes snap across. Native Christian girls in Tinnevely have long ears operated on, and cut short at Mission hospital. Objection that short ears make them look like deva-dasis (dancing girls) dying out. In statues of Buddha, as far back as 2nd century A.D., ears dilated, but void of ornaments.

3. Chipping and filing of incisor teeth, practised by Kādīrs of Ānaimalai hills. Practice common to some tribes in Africa and Malay Archipelago. Whence did Kādīrs inherit the custom?

4. Amputation of terminal phalanges of ring and little fingers, practised on women of Vakkaliga sect in Mysore. Operation performed when their children have the ear and nose-boring ceremony carried out.

Odour of skin. Missionary Hue could distinguish between smell of Tibetan, Hindu, Negro and Chinaman, by sense of smell. Characteristic odour of Todas. Mosquitoes mercilessly attack Europeans newly arrived in India. Old stagers comparatively free from attack, and said to be protected by smell of skin, which develops as result of climatic conditions, and is distasteful to mosquito.

Skin of body. Extent of development of hair and areas of distribution. Median strip of hair on abdomen common Dravidian type. Todas characterised by excessive development of hairy system, which may form thick fur on chest. Todas have this character in common with Australians and Ainus of Japan.

Hair of head, straight, wavy, curly, frizzly, or woolly. Woolly hair, in which little curls interlock, and form tufts resembling wool, characteristic of Negroes; curly or wavy of inhabitants of Southern India. Repeatedly asserted that Paniyans of Malabar woolly-haired, and of African descent. No evidence. Their hair curly, not woolly. Native hair universally black in adult; frequently light-brown in infancy. Mode of doing hair; dyeing with henna (leaves of *Lawsonia alba*). Photograph of Cheruman with hair in long matted plaits in observance of death ceremonial.

Colour of iris, or diaphragm of eye. Natives, as a rule, have dark eyes, but sometimes blue as inherited character. Badaga family, in which grandfather, father, and grandchildren all had light blue eyes. In Madras City two Native albinos with pink skin, white hair, and pink eyes, from absence of pigment.

Shape of face--long, narrow; short, broad; pyramidal, etc.

Nose. Shape when viewed in profile. Concave nose common among Dravidians, due to hollowing out of nasal bones.

Cheek-bones, flat or prominent. Prominence of cheek-bones, and obliquely-set eyes characteristic of Mongolians. Irulas of Nilgiris have prominent cheek-bones, but straight eyes.

Prominence of superciliary (brow) ridges. Characteristic of Neanderthal skull, Pithecanthropus, Australians, etc. Compare skull of higher ape with that of European. Tamil skulls with ridges well developed, and other Australian characters.

Lips, thin, thick, or everted. Photograph of Kādir with upper and lower lips conspicuously everted.

Lower jaw, prognathous or orthognathous, when viewed in profile.

Measurements recorded in centimetres and millimetres (2·54 cm.=1 inch), divided into (a) essential; (b) accessory. Necessary, for purpose of comparison of various tribes and castes of Indian peninsula, to have notes on body-colour, and accurate statistics relating to body height, length and breadth of head, and height and width of nose. With these data to work on, easy to fit any tribe or caste in its correct place in the anthropological puzzle. Training necessary before measurements, *e.g.*, of nose and head, can be accepted. Accuracy most essential in smaller measurements. Anthropometric results based on average of sum of measurements of a number of individuals.

1. Standing height. Classification. Tall, 170 cm. and upwards; middle height 170—160 cm.; short 160 cm. and below. In South India no tall race, tribe, or caste, though Todas nearly reach this dignity (average 169·6 cm.). Compare heights on standard. Patagonians tallest, Stanley's dwarfs (African) shortest. Jungle tribes of South India are about same height as a number of Australians measured in Sydney. Standing height one of the measurements used for purposes of criminal identification.

Examples :					Average.
					CM.
English	..	..	..	..	170·8
Todas ..	..	..	..	..	169·6
Eurasians	..	..	..	..	166·6
Brāhmans	..	..	..	..	162·5
Pariahs	..	..	..	..	161·9
Paniyans	..	..	..	..	157·4

2. Relative length of upper extremities, best determined by comparison of span of arms outspread at right angles to body with stature, and of distance from tip of middle finger to patella (knee-cap) in altitude of attention with extensor muscles of thigh relaxed.

Examples : Span of arms.					Average relative to stature = 100.
Eurasians	..	..	..	..	103·6
Pariahs	..	..	..	..	106·2
Kādīrs	..	..	..	..	107
Negroes	..	..	..	..	108·1

Examples : Middle finger to knee-cap.

					Average relative to stature = 100.
English	..	..	..	..	7·5
Brāhmans	..	..	..	..	6·2
Pariahs	..	..	..	..	5·8
Paniyans	..	..	..	..	4·6
Negroes ..	..	..	..	..	4·4

Hands of long-armed Rāma said, in Hindu epic, to have reached to his knees. Compare skeleton of Negro with that of Orang-utan, in which hands reach far below knees.

3. Chest. Physical rather than racial test. Measurement taken with tape over nipples with arms above head, and hands joined.

Examples :					Average relative to stature = 100.
Paniyans	..	..	..	..	51·8
Kādirs	..	..	..	..	51
Sepoys, 28th M.I.	..	..	..	..	50·4
Brāhmans	..	..	..	..	49·8
Pariahs	..	..	..	..	48·9

Paniyans and Kādirs (jungle-tribes), short of stature and deep-chested ; well adapted for mountaineering.

4. Hip-breadth. Measured across anterior spines of ilia (hip-bones). Ratio between breadth of hips and length of foot important as distinguishing character between races, castes, and tribes of Southern India. Frequently come across Natives with foot-length considerably greater than hip-breadth. In Europeans hip-breadth considerably in excess of foot-length.

Head measurements estimated with callipers and compasses.

5. Maximum length and breadth of head. Length from glabella or ophryon to occipital point. Breadth : greatest breadth across parietal bones. Easiest to measure, on living subject, heads clean-shaved in observance of religious ceremony, on which shape of head easily studied. Difficulty in measuring heads of Todas, whose dense locks offer obstacle to shifting of callipers in search for right spot.

Examples :

	Average.	
	Length.	Breadth.
	CM.	CM.
Pariahs	18·6	13·7
Brāhmans (poorer classes).	18·6	14·2
Civil Servants, Madras ..	19·6	15·3
Other Europeans, Madras.	19·4	15

Ratio of length to breadth represented by cephalic index determined by formula.

$$\frac{\text{Breadth} \times 100.}{\text{Length.}}$$

More nearly breadth and length correspond, higher the index. Longer the head in proportion to breadth, lower the index. Heads range in type from long, narrow (dolichocephalic) to short, broad (brachycephalic). Intermediate type, mesaticephalic, common among half-breeds. Dolichocephalic type characteristic of Dravidians. Todas have longest, Brahmans broadest heads among Natives of Southern India. Character of Dravidian skull is absence of convexity of posterior portion of skull, with result that back of head forms a flattened arc of a considerable length almost at right angles to base of skull. Corresponding shortness of head and diminished brain-space. Compare series of Tamil skulls with those of European, Jew, etc. Cephalic indices, European 74·7; Tamil 74·4; Negro 72·5; Andamanese 83·2; Sinhalese 85·1; Burmese 86·6. Shape of skull does not necessarily indicate size of brain. Section of Negro skull with large bump on top caused by bony thickening and large frontal sinus. Relative sizes of brains, or cranial capacity, estimated on skull by plugging foramina (holes) with cotton wool, and filling up skull through foramen magnum (large hole at base) with small shot or mustard seed. Calculate by pouring shot or seed into glass vessel graduated in cubic centimetres. Estimate cubic capacity of skulls of various Dravidian classes.

6. Relation of greatest breadth of facial portion of head across zygomatic arches to greatest breadth of lower jaw (bigoniac).

$$\frac{\text{Bigoniac} \times 100}{\text{Zygomatic}} = \text{maxillo-zygomatic index.}$$

7. Facial angle. Estimated with goniometer. Some Natives object to holding it between their teeth, as being source of pollution. Diagrams of classic Greek head with forehead thrown forward, heads of Dravidian, Negro, and Chimpanzee. Facial angle of Dravidian averages from 67° to 70° . Dravidians as a whole orthognathous, *i.e.*, line of upper jaw more or less vertical when viewed in profile. Negro conspicuously prognathous, *i.e.*, upper jaw projects forwards, with corresponding lowering of facial angle. Measure true sub-nasal prognathism. Demonstrate facial angle of Brāhman and Negro skulls. Prognathism indicated on skull by basi-alveolar length, *i.e.*, distance between front of foramen magnum and alveolar point in centre of upper jaw. Show Tamil skull, possessing not only prominent superciliary ridges, but also well-marked prognathism. Australian affinities. Use of boomerang by Kullans and Maravans of Southern India. Refer to skulls of Man and ape, in which line drawn from glabella to basion indicates predominance of cranial or brain-bearing portion in former, and of facial portion of latter. Show sections of skull of horse and elephant, demonstrating small size of brain relatively to that of head.

8. Nose—facial feature, which is most likely to be transmitted from one generation to another. Nasal character, in India, most important factor in differentiation of race, tribe, and class, and in determination of pedigree from broad-nosed ancestors. Shape not so important as relation of height to breadth.

$$\frac{\text{Breadth} \times 100}{\text{Height}} = \text{Nasal index.}$$

Examples :

Brāhman.

$$\left. \begin{array}{l} \text{Height } 5.5 \text{ cm.} \\ \text{Breadth } 3.4 \text{ ,,} \end{array} \right\} \frac{3.4 \times 100}{5.5} = 61.8 = \text{nasal index.}$$

Paniyan.

$$\left. \begin{array}{l} \text{Height } 4 \text{ cm.} \\ \text{Breadth } 4 \text{ ,,} \end{array} \right\} \frac{4 \times 100}{4} = 100 = \text{do.}$$

Kurumba.

$$\left. \begin{array}{l} \text{Height } 3.8 \text{ cm.} \\ \text{Breadth } 4 \text{ ,,} \end{array} \right\} \frac{4 \times 100}{3.8} = 105.3 = \text{do.}$$

Nasal index lowest in Aryans, highest in jungle-tribes. Index increases as body height diminishes. High nasal index, and short stature of individuals belonging to various

castes and tribes, must be attributed to lasting influence of short, broad-nosed ancestor.

				Average	
				Height.	Nasal index.
				CM.	CM.
Lambādis (Aryan language)				164·5	69·1
Eurasians	..	..	..	166·6	69·5
Tiyans	..	..	..	163·7	75
Pariahs	..	..	..	162·1	80
Kurumbas	..	..	..	157·6	87
Paniyans	..	..	..	157·4	95·1

Contrast nasal indices on skulls of European, Tamil, and Negro. European 37·5; Tamil 57·8; Negro 60·9. In absence of nostrils, nasal index never nearly so high in skeleton as in living subject.

NOTE ON THE DRAVIDIAN HEAD.

I recently came across a passage in Taylor's 'Origin of the Aryans' (Contemporary Science Series), wherein it is stated that "the Todas are fully dolichocephalic, differing in this respect from the Dravidians, who are brachycephalic." As this statement is not in accord with my own observations, it is right that I should place on record the results obtained from the measurement of a large number of Native tribes and castes of Southern India other than Brāhmans and Muhammadans, which have been investigated by me in the course of the last few years. The figures, published below, show that the average cephalic index of 639 members of 19 different tribes and castes was 74·1; and that in only 19 out of the 639 individuals did the index exceed 80. So far, then, from the Dravidian being separated from the Todas by reason of their higher cephalic index, this index is, in the Todas, actually higher than in some of the remaining Dravidian peoples, *e.g.*, the Badagas, Pallis, Muppas, and Ambattans.

		Number of men examined.	Average cephalic index.	Number of times in which cephalic index exceeded 80.
Badagas .. ..	..	40	71·7	
Muppas .. ..	..	24	72·3	
Tiyans .. ..	..	60	72·8	1 (80·3)
Pallis .. ..	..	40	72·9	
Kādirs .. ..	..	23	73	
Todas .. ..	..	25	73·3	
Ambattans ..	..	29	73·4	
Cherumans ..	..	60	73·4	2 (80·1; 81·9)
Pariahs .. ..	..	40	73·6	
Paniyans ..	..	25	74	1 (81·1)
Kotas .. ..	..	25	74·1	
Vellālas .. ..	..	40	74·1	1 (81·1)
Malaiālis ..	..	50	74·3	1 (82·8)
Malasars ..	..	23	74·5	
Kammālans ..	..	40	75	5 (80·1; 80·1; 80·2; 80·6; 81·5)
Kurubas .. ..	..	25	75·8	2 (80·1; 82·1)
Irulas .. ..	..	25	75·8	1 (80·9)
Kongas .. ..	..	20	77	2 (80·3; 81·7)
Koravas .. ..	..	25	77·5	3 (82·4; 83·7; 83·7)
		<hr/> 639 <hr/>	<hr/> 74·1 <hr/>	<hr/> 19 (max. 83·7). <hr/>

THE DRAVIDIAN PROBLEM.

THE manifold views, which have been brought forward as to the origin and place in nature, of the indigenous population of Southern India, are scattered so widely in books, manuals, and reports, that it will be convenient, not only for my own purpose hereafter, but for the purpose of those interested in, or urged by the University syllabus into a pseudo-interest in the subject of South Indian ethnology, if I bring together the evidence derived from sundry authoritative sources.

The original name for the Dravidian family, it may be pointed out, was Tamulic, but the term Dravidian was substituted by Bishop Caldwell, in order that the designation Tamil might be reserved for the language of that name. Drávida is the adjectival form of Dravida, the Sanskrit name for the people occupying the south of the Indian Peninsula (the Deccan of European writers), and Tamil is merely another form of Dravida.

Accepting, with one small addition (Máhl, the mother-tongue of the Natives of Minicoy Island), the classification of Bishop Caldwell, Mr. H. A. Stuart, Census Commissioner, 1891, gives the following list of the Dravidian languages and their dialects, with the numbers of those who returned each :—

Language.	Dialect.	Total.
Tamil ..	{ Tamil ..	14,076,989
	{ Yerukala or	
	{ Korava ..	37,536
	{ Irula	1,614
Telugu ..	{ Kasuva ..	316
	{	13,653,674
Malayálam	.. ..	2,688,332
Máhl ..	.. ..	3,167
Canarese ..	{ Canarese ..	1,445,650
	{ Badaga ..	30,656
	{ Kurumba ..	3,742
Tulu ..	{ Tulu	461,176
	{ Koraga ..	1,868
	{ Bellara ..	668
Khond ..	.. ..	190,893

Language.	Dialect.				Total.
Gond ..	{	Gond ..	..	..	6,694
		Gotte ..	..	..	353
		Kóya ..	..	..	36,503
Tóda	736
Kôta	1,201
Kodagu	247

According to Haeckel¹ three of the twelve species of Man—the Dravidas (Deccans ; Sinhalese) Nubians, and Mediterraneane (Caucasians, Basque, Semites, Indo-Germanic tribes)—“agree in several characteristics, which seem to establish a close relationship between them, and to distinguish them from the remaining species. The chief of these characteristics is the strong development of the beard, which, in all other species, is either entirely wanting, or but very scanty. The hair of their heads is in most cases more or less curly. Other characteristics also seem to favour our classing them in one main group of curly-haired men (Euplocomi). At present the primæval species, *Homo Dravida*, is only represented by the Deccan tribes in the southern part of Hindustan, and by the neighbouring inhabitants of the mountains on the north-east of Ceylon. But, in earlier times, this race seems to have occupied the whole of Hindustan, and to have spread even further. It shows, on the one hand, traits of relationship to the Australians and Malays ; on the other to the Mongols and Mediterraneane. Their skin is either of a light or dark brown colour ; in some tribes of a yellowish brown, in others almost black brown. The hair of their heads is, as in Mediterraneane, more or less curled ; never quite smooth, like that of the Euthycomi, nor actually woolly, like that of the Ulotrichi. The strong development of the beard is also like that of the Mediterraneane. The oval form of face seems partly to be akin to that of the Malays, partly to that of the Mediterraneane. Their forehead is generally high, their nose prominent and narrow, their lips slightly protruding. Their language is now very much mixed with Indo-Germanic elements, but seems to have been originally derived from a very peculiar primæval language.”

In the chapter devoted to ‘Migration and Distribution of Organisms,’ Haeckel, in referring to the continual changing of the distribution of land and water on the surface of

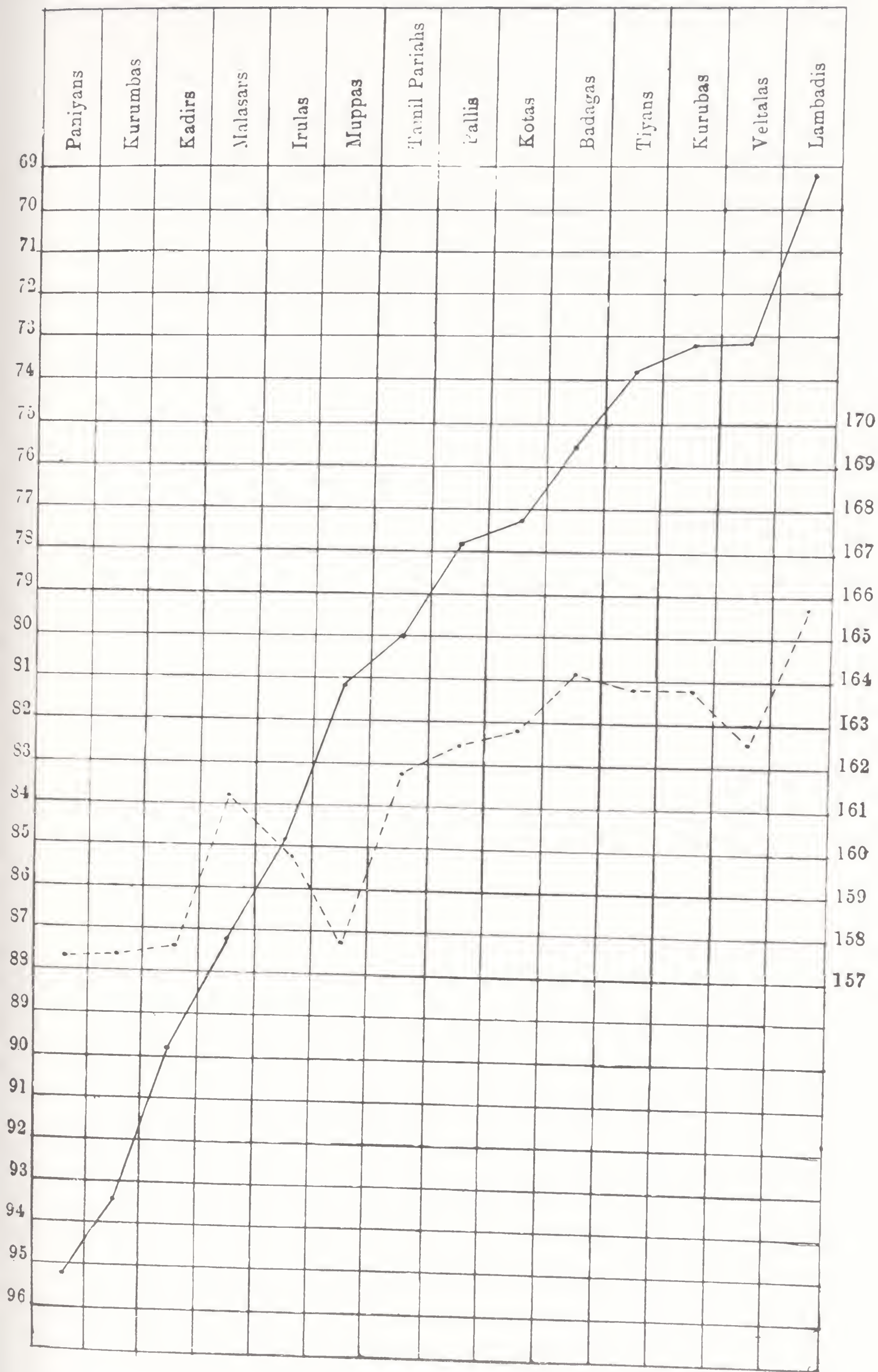
¹ ‘History of Creation.’

the earth, says: "The Indian Ocean formed a continent, which extended from the Sunda Islands along the southern coast of Asia to the east coast of Africa. This large continent of former times Sclater has called Lemuria, from the monkey-like animals which inhabited it, and it is at the same time of great importance from being the probable cradle of the human race. The important proof, which Wallace has furnished by the help of chronological facts, that the present Malayan Archipelago consists in reality of two completely different divisions, is particularly interesting. The western division, the Indo-Malayan Archipelago, comprising the large islands of Borneo, Java, and Sumatra, was formerly connected by Malacca with the Asiatic continent, and probably also with the Lemurian continent just mentioned. The eastern division, on the other hand, the Austro-Malayan Archipelago, comprising Celebes, the Moluccas, New Guinea, Solomon's Islands, etc., was formerly directly connected with Australia."

On the evidence of the very close affinities between the plants and animals in Africa and India at a very remote period, Mr. R. D. Oldham concludes that there was once a continuous stretch of dry land connecting South Africa and India. "In some deposits," he says [Man. Geol. Ind.] "found resting upon the Karoo beds on the coast of Natal, 22 out of 35 species of Mollusca and Echinodermata collected and specifically identified, are identical with forms found in the cretaceous beds of Southern India, the majority being Trichinopoli species. From the cretaceous rocks of Madagascar six species of cretaceous fossils were examined by Mr. R. B. Newton in 1889, of which three are also found in the Ariyalur group [Southern India]. The South African beds are clearly coast or shallow water deposits, like those of India. The great similarity of forms certainly suggests continuity of coast line between the two regions, and thus supports the view that the land connection between South Africa and India, already shown to have existed in both the lower and upper Gondwana periods, was continued into cretaceous times."

It is worthy of note that Haeckel defines the nose of the Dravidian as a prominent and narrow organ. For Mr. Risley² lays down that, in the Dravidian type, the nose is thick and broad, and the formula expressing the proportionate dimension (nasal index) is higher than in any known

² 'Tribes and Castes of Bengal.'



race, except the Negro; and that the typical Dravidian, as represented by the Mále Pabária (nasal index 94·5), has a nose as broad in proportion to its length as the Negro, while this feature in the Aryan group can fairly bear comparison with the noses of sixty-eight Parisians, measured by Topinard, which gave an average of 69·4. In this connection a study of table XXXIII, based on the results of my measurements, is not without interest. In this table I have brought together, for the purpose of comparison, the nasal indices (lined) and stature (dotted) of jungle tribes, Dravidians of the plains, and the nomad Lambādis, who speak an Aryan language. The table demonstrates very clearly a progressive and unbroken series ranging from the typical jungle-man, whom I may term archi-Dravidian, dark-skinned, short of stature, and platyrrhine, through various mixed Dravidian classes of the plains, to the comparatively fair-skinned, leptorrhine Lambādi. The influence of crossing through many ages on the Dravidian type is referred to hereafter. But I may draw attention to the indisputable fact that it is to the lasting influence of a broad nosed ancestor, such as is represented at the present day by the jungle tribes, that the very high nasal index and short stature of many of the modern inhabitants of Southern India (Dravidian, Muhammadan, Eurasian, and 'Aryan') must be attributed. Viewed in the light of this remark, the connection between the following mixed collection of individuals, all of very dark colour, short of stature, and with nasal index exceeding 90, calls for no further explanation:—

	Stature.	Nasal Index.
	CM.	CM.
Saiyad Muhammadan ..	.. 160	91·3
Vellāla .. ..	.. 154·8	91·6
Muppa .. ..	.. 151·2	91·9
Malaiāli .. ..	.. 158·8	92·5
Konga .. ..	.. 157	92·7
Kādir .. ..	.. 156·5	92·7
Pattar Brāhman ..	.. 157·6	92·9
Kurumba .. ..	.. 159·6	93·2
Malasar .. ..	.. 149·2	95
Smārta Brāhman ..	.. 159	95·1
Palli .. ..	.. 157·8	95·1
Irula .. ..	.. 155·4	95·1
Paniyan .. ..	.. 157·8	95·1
Irula .. ..	.. 158·6	100
Tamil Pariah .. ..	.. 160	105
Paniyan .. ..	.. 158·8	105·3
Kādir .. ..	.. 148·6	110·5

By Huxley³ the races of mankind are divided into two primary divisions : the Ulotrichi with crisp or woolly hair (Negros ; Negritos), and the Leiotrichi with smooth hair. And the Dravidians are included in the Australioid group of the Leiotrichi “ with dark skin, hair, and eyes, wavy black hair, and eminently long, prognathous skulls, with well-developed brow ridges, who are found in Australia and in the Dekhan.” There is, in the collection of the Royal College of Surgeons’ Museum, an exceedingly interesting ‘Hindu’ skull from Southern India, conspicuously dolichocephalic, and with highly developed superciliary ridges. Some of the recorded measurements of this skull are as follows :—

Length	..	..	..	19·6 cm.
Breadth	..	..	..	13·2 „
Cephalic index	..	..	..	67·3
Nasal height	..	..	..	4·8 cm.
„ breadth	..	..	..	2·5 „
„ index	..	..	..	52·1

Another ‘Hindu’ skull, in the collection of the Madras Museum, with similar marked development of the superciliary ridges, has the following measurements :—

Cephalic length	..	..	..	18·4 cm.
„ breadth	..	..	..	13·8 „
„ index	..	..	..	75
Nasal height	..	..	..	4·9 cm.
„ breadth	..	..	..	2·1 „
„ index	..	..	..	42·8

I was quite recently much impressed by a Tamil Pariah, who by a happy chance came before me for examination, and of whom the following measurements were recorded :—

Height	..	..	..	161·8 cm.
Cephalic length	..	..	..	19·7 „
„ breadth	..	..	..	14·2 „
„ index	..	..	..	72·1
Nasal height	..	..	..	4·4 cm.
„ breadth	..	..	..	4·2 „
„ index	..	..	..	95·5 „

With his prominent superciliary ridges and brushy eyebrows, hairy chest, abdomen, back, arms, and legs, and long, dolichocephalic head, this man might, save for his broad nose, have passed for a Toda of short stature, such as is frequently met with among the Toda community.

³ ‘Anatomy of Vertebrated Animals.’

I am unable to subscribe to the general prognathism of the Dravidian tribes of Southern India, though there are some notable exceptions. Wavy and curly black hair are common types, but I have seen no head of hair to which the term woolly could be correctly applied.

By Flower and Lydekker ⁴ a white division of Man, called the Caucasian or Eurafrican, is made to include Huxley's Xanthochroi (blonde type) and Melanochroi (black hair and eyes, and skin of almost all shades from white to black); and the Melanochroi are said to "comprise the greater majority of the inhabitants of Southern Europe, Northern Africa, and South West Asia, and consist mainly of the Aryan, Semitic, and Hamitic families. The Dravidians of India, the Veddahs of Ceylon, and probably the Ainos of Japan, and the Maoutze of China, also belong to this race, which may have contributed something to the mixed character of some tribes of Indo-China ⁵ and the Polynesian islands, and have given at least the characters of the hair to the otherwise Negroid inhabitants of Australia. In Southern India they are largely mixed with a Negrito element, and in Africa, where their habitat becomes coterminous with that of the Negroes, numerous cross-races have sprung up between them all along the frontier line. The ancient Egyptians were nearly pure Melanochroi."

In describing the 'Hindu type,' Topinard ⁶ divides the population of the Indian peninsula into three strata, viz., the Black, the Mongolian, and the Aryan. "The remnants of the first," he says, "are at the present time shut up in the mountains of Central India under the name of Bhils, Mahairs, Ghonds, and Khonds; and in the south under that of Yenâdis, Maravers, Kurumbas, Veddahs, etc. Its primitive characters, apart from its black colour and low stature, are difficult to discover, but it is to be noticed that travellers do not speak of woolly hair in India. The second has spread over the plateaux of Central India by two lines of way, one to the north-east, the other to the north-west. The remnants of the first invasion are seen in the Dravidian or Tamil tribes, and those of the second in the Jhats. The third more recent, and more important as to quality than as to

⁴ Mammals, living and extinct.

⁵ Vide Madras Museum Bull. No. 2, Vol. II, p. 119, sq: also Tooth-chipping, Kâdirs, antea, p. 143.

⁶ 'Anthropology.' Translation.

number, was the Aryan." In speaking further of the Australian type, characterised by a combination of smooth hair with Negroid features, Topinard states that "it is clear that the Australians might very well be the result of the cross between one race with smooth hair from some other place, and a really Negro and autochthonous race. The opinions expressed by Huxley are in harmony with this hypothesis. He says the Australians are identical with the ancient inhabitants of the Deccan. The features of the present blacks in India, and the characters which the Dravidian and Australian languages have in common, tend to assimilate them. The existence of the boomerang⁷ in the two countries, and some remnants of caste in Australia, help to support the opinion. But the state of extreme misery of the inferior tribes may equally explain some of the physical differences which they present. Woolly hair appears now to be but seldom seen. A few examples have been noticed in the York peninsula and the north-west point, which might be accounted for by the immigration of Papuans from New Guinea, and in the south by the passage over to the other side of Behring's Straits of some Tasmanians to the continent. On the other hand, on studying the Australian skull, we notice tolerably-marked differences of type, and it is certain that the Polynesians landed at some period or other in the north-west, and the Malays in the north-east. Lastly, if the Australians are thorough Hindoos as regards their hair, they are Melanesians, or, if you will, new Hebrideans, new Caledonian Negroes, in every other respect. The question may, therefore, be left. We are still in ignorance as to whether the present Australian race took its origin on the spot, with the characters that we admit as belonging to it, or whether, on the contrary, it was altogether constituted in Asia, or whether it is a cross race, and, in that case, of what elements it is composed. Those which we might consider in India as of the same race are the Bhils, Ghonds, Khonds, Mahairs, Varalis, Mundas; Veddahs, Yanādis, and Maravers of the coast of Coromandel. Among the Todas of the Nilgherries, and, strangely enough, farther on towards the north,

⁷ *Vide* Oppert, Journal, Madras Literature Society, Vol. XXV. Boomerangs are used by the Tamil Maravars and Kallans when hunting deer. The Madras Museum collection contains three (two ivory, one wooden) from the Tanjore armoury. In the arsenal of the Pudukkóttai Rāja a stock of wooden boomerangs is always kept. Their name in Tamil is *valai tadi* (bent stick). When thrown, a whirling motion is imparted to the weapon, which causes it to return to the place from which it was thrown. The Natives are well acquainted with this peculiar fact.

among certain of the Ainus, two of the fundamental Australian traits are met with; namely, the very projecting superciliary arch, and the abundant hair over the whole body. In the same Nilgherry hills, in the desired conditions for concealing the remnants of ancient races, two tribes, the Irulas and Kurumbas, especially afford matter for reflection." And to these must be added the Paniyans, Kādīrs, Sholigas, and other jungle tribes, in the investigation of which I am at present interested. Finally, Topinard points out, as a somewhat important piece of evidence, that, in the west, about Madagascar, and the point of Aden in Africa, there are black tribes with smooth hair, or, at all events, large numbers of individuals who have it, mingled particularly among the Somālis and the Gallas, in the region where M. Broca has an idea that some dark and not Negro race, now extinct, once existed. He also refers, in a sketch of ethnic characters, to the institution of caste, which is regularly established in India, and found in Australia in a rudimentary state, as well as in some parts of the Malay Peninsula.

At the last meeting of the British Association, Mr. W. Crooke gave expression to the view that the Dravidians represent an emigration from the African continent, and discounted the theory that the Aryans drove the 'aboriginal' inhabitants into the jungles with the suggestion that the Aryan invasion was more social than racial, viz., that what India borrowed from the Aryans was manners and customs. According to this view it must have been reforming 'aboriginics' who gained the ascendancy in India, rather than new comers; and those of the 'aborigines' who clung to their old ways got left behind in the struggle for existence.

In an article devoted to the Australians, Professor R. Semon writes as follows⁸: "We must, without hesitation, presume that the ancestors of the Australians stood, at the time of their immigration to the continent, on a lower rung of culture than their living representatives of to-day. They must have brought with them their only domestic animal, the Dingo dog, for they could not have found it in Australia, which contains marsupials, but no placental mammals. Whence, and in what manner the immigration took place, it is difficult to determine. In the neighbouring quarter of the globe there lives no race, which is closely related to the Australians. Their nearest neighbours, the Papuans of New

⁸ Die Natur. No. 20, 17 May, 1896.

Guinea, the Malays of the Sunda Islands, and the Maoris of New Zealand, stand in no close relationship to them. On the other hand, we find further away, among the Dravidian aborigines of India, types which remind us forcibly of the Australians in their anthropological characters. In drawing attention to the resemblance of the hill-tribes of the Deccan to the Australians, Huxley says: 'An ordinary cooly, such as one can see among the sailors of any newly-arrived East Indian vessel, would, if stripped, pass very well for an Australian, although the skull and lower jaw are generally less coarse.' Huxley here goes a little too far in his accentuation of the similarity of type. We are, however, undoubtedly confronted with a number of characters—skull formation, features, wavy curled hair—in common between the Australians and Dravidians, which gain in importance from the fact that, by the researches of Norris, Bleek, and Caldwell, a number of points of resemblance between the Australian and Dravidian languages have been discovered, and this despite the fact that the homes of the two races are so far apart, and that a number of races are wedged in between them, whose languages have no relationship whatever to either the Dravidian or Australian.

"There is much that speaks in favour of the view that the Australians and Dravidians sprang from a common main branch of the human race. According to the laborious researches of Paul and Fritz Sarasin, the Veddas of India and Ceylon, whom one might call pre-Dravidians, would represent an off-shoot from this main stem. When they branched off, they stood on a very low rung of development, and seem to have made hardly any progress worth mentioning. The remarkable ainus of Japan, and the 'Khmers' and Chams of Cambogia seem to be scattered off-shoots of the Dravidian-Australian main branch.

"The Caucasians have probably sprung from the Dravidians, and we, Europeans, should, therefore, have to look upon the low savages of Australia as relations, very distant it is true, but yet nearer related to us than Negroes, Malays, and Mongols. It has been pointed out by several observers that the features of the Australians, with all their ugliness and coarseness, frequently remind one of low types of the Caucasian features. To those who regard it as a degradation to the human race, when science draws the conclusion that man has sprung from the brute inhabitants of the earth, and stands in close relationship with the ape-family, the reflection will be also unpleasant that, among the human species, the

Caucasians, who, for several thousand years, have progressed so splendidly and so far, have as near relations the nomad savages of Australia, and the Veddahs who are designated monkeys in the Hindu legend. To science the only consideration is whether the conclusions are correct, not whether they are according to the personal taste of the few. It is difficult to understand how there can be anything degrading in belonging to a race, which, from crude beginnings, has worked itself up to the still rather modest level of modern Caucasian civilisation through stages, which are represented by the Veddahs, Australians, and Dravidians. On the other hand, there is something sublime in the conviction that the development of the human race, both bodily and intellectual, is as yet unfinished, and that our present state of civilisation, burthened with innumerable imperfections, will be regarded by our descendants in the far future as a long surpassed one, as derisively as we now look down on the state of civilisation and culture of the Australians and Veddahs."

In dealing with the Australian problem, Mr. A. H. Keane⁹ refers to the time when Australia formed almost continuous land with the African continent, and to its accessibility on the north and north-west to primitive migration both from India and Papuasia. "That such migrations," he says, "took place, scarcely admits of a doubt, and the Rev. John Mathew¹⁰ concludes that the continent was first occupied by a homogeneous branch of the Papuan race either from New Guinea or Malaysia, and that these first arrivals, to be regarded as true aborigines, passed into Tasmania, which at that time probably formed continuous land with Australia. Thus the now extinct Tasmanians would represent the primitive type, which, in Australia, became modified, but not effaced, by crossing with later immigrants, chiefly from India. These are identified, as they have been by other ethnologists, with the Dravidians, and the writer remarks that 'although the Australians are still in a state of savagery, and the Dravidians of India have been for many ages a people civilized in a great measure, and possessed of literature, the two peoples are affiliated by deeply-marked characteristics in their social system as shown by the boomerang, which unless locally evolved, must have been introduced from India. But the variations in the physical characters of the Natives appear to be too great to be accounted for by a single graft; hence

⁹ 'Ethnology,' 1896.

¹⁰ Proc. R. Soc. N. S. Wales, XXIII, part III.

Malays also are introduced from the Eastern Archipelago, which would explain both the straight hair in many districts, and a number of pure Malay words in several of the native languages." Dealing later with the ethnical relations of the Dravidas, Mr. Keane says that "although they preceded the Aryan-speaking Hindus, they are not the true aborigines of the Deccan, for they were themselves preceded by dark peoples, probably of aberrant Negrito type. They are usually regarded as a Mongoloid people, who entered India from the north-west, leaving on the route the Brahúis of Baluchistan, whose language shows some remote resemblance to Dravidian. But at present the type cannot be called Mongolic; it scarcely differs from the average Hindu, except in some districts, where it has been somewhat modified by contact with the Kolarians and dark aborigines It would seem that the position of the Indian Dravidas is somewhat analogous to the Caucasian type, and both have accepted Aryan culture, while preserving intact their non-Aryan speech."

Placing the Dravidians with the Negrito and Negrito-Papuan families of the Negrito section of the Indo-Melanesian branch of the Negro or Ethiopian trunk, de Quatrefages¹¹ lays special stress on the influence of crossing (*métissage*), while recognising that the Kurumbas, and other jungle tribes, have preserved their purity of blood and ethnological characters more or less completely. Which purity of blood and preservation of characters are unhappily commencing to degenerate as the result of the opening up of the jungles for tea and coffee estates, and the contact with more civilised tribes and races, black and white. "In the Gangetic peninsula," de Quatrefages says, "and the whole of India to the foot of the Himālayas, this crossing is carried out on an immense scale. All the so-called Dravidian population, and many others known by different names, indicate, by their physical characters, the presence of a black ethnological element. Documents of all sorts, photographs, skulls, etc., testify that this element is almost constantly Negrito. The rôle played in this admixture by the three fundamental types is very unequal, and varies according to the country which one examines. But, wherever Dravidians exist, the Blacks constitute the foundation of the half-breed race. Most frequently it is the yellow race, represented by the Thibetans, which has united with them. The white race only ranks in

¹¹ ' *Histoire générale des Races Humaines.* '

the third line. The legend of Ráma permits us to allow that the Aryans, on their arrival in Southern India, did not disdain to contract political alliances with these little black people.¹² In India most of the Dravidian tribes appear to owe their characters to an admixture of black and yellow. In the valleys of the Upper Bráhma-putra, and many other localities, the influence of Thibetan races is very marked. The general type has been altered by crossing with Bráhmanical Aryans, and other white races. It is this *ensemble* of half-caste races, all having Negrito blood in common, possibly also some traces of Australian blood, that I propose to designate by the name of Dravidians. In a region invaded a thousand times since the most remote times, many of the peoples cannot but have been profoundly modified from an ethnological point of view, though preserving their languages; while others forgot the language of their fathers, whose essential physical characters they, however, preserved."

Turning now to writers, who have spent a great part of their lives in the Madras Presidency. In the 'Manual of the Administration' of this Presidency, Dr. C. Maclean writes as follows: "The history proper of the south of India may be held to begin with the Hindu dynasties formed by a more or less intimate admixture of the Aryan and Dravidian systems of Government. But, prior to that, three stages of historical knowledge are recognizable; first, as to such aboriginal period as there may have been prior to the Dravidian; secondly, as to the period when the Aryans had begun to impose their religion and customs upon the Dravidians, but the time indicated by the early dynasties had not yet been reached. Geology and natural history alike make it certain that, at a time within the bounds of human knowledge, Southern India did not form part of Asia. A large southern continent, of which this country once formed part, has ever been assumed as necessary to account for the different circumstances. The Sanscrit Pooranic writers, the Ceylon Boodhists, and the local traditions of the West Coast, all indicate a great disturbance of the point of the Peninsula and Ceylon within

¹² How great must have been the influence of hybridisation on the population of Southern India, when carried on through ages, is accentuated by reference to the practical outcome of only a few centuries of contact between Europeans and Natives, which has resulted in the creation and establishment of a fertile half-breed race, numbering, according to the Madras Presidency Census return, 1891, 26,648—*vide* Madras Museum Bulletin, Vol. II, No. 2, 1898.

recent times.¹³ Investigations in relation to race show it to be by no means impossible that Southern India was once the passage-ground, by which the ancient progenitors of Northern and Mediterranean races proceeded to the parts of the globe which they now inhabit. In this part of the world, as in others, antiquarian remains show the existence of peoples, who used successively implements of unwrought stone, of wrought stone, and of metal fashioned in the most primitive manner.¹⁴ These tribes have also left cairns and stone circles indicating burial places. It has been usual to set these down as earlier than Dravidian. But the hill Coorumbur of the Pulmanair plateau, who are only a detached portion of the oldest known Tamulian population, erect dolmens to this day. The sepulchral urns of Tinnevely may be earlier than Dravidian, or they may be Dravidian. It has been stated that the wild tribes of Southern India are physiologically of an earlier type than the Dravidian tribes. This position has been found not to be proved, the conclusions being of a negative nature. The evidence of the grammatical structure of language is to be relied on as a clearly distinctive mark of a population, but, from this point of view, it appears that there are more signs of the great lapse of time than of previous populations. The grammar of the south of India is exclusively Dravidian, and bears no trace of ever having been anything else. The hill, forest, and Pariah tribes use the Dravidian forms of grammar and inflection The Dravidians, a very primeval race,¹⁵ take a by no means low place in the conjectural history of humanity. They have affinities with the Australian aborigines, which would probably connect their earliest origin with that people. But they have emerged

¹³ "It is evident that, during much of the tertiary period, Ceylon and South India were bounded on the north by a considerable extent of sea, and probably formed part of an extensive southern continent or great island. The very numerous and remarkable cases of affinity with Malaya require, however, some closer approximation to these islands, which probably occurred at a later period." Wallace, 'Geographical Distribution of Animals.'

¹⁴ *Vide* Brecks' 'Primitive Tribes and Monuments of the Nílگیرis'; Phillips 'Tumuli of the Salem district'; Rea, 'Prehistoric Burial Places in Southern India'; and the Madras Museum collection. Mr. R. Bruce Foote has, I am happy to say, in hand the preparation of a catalogue raisonné of his magnificent collection of Indian 'Prehistoric Implements, &c.'

¹⁵ Sir John Evans, in his Presidential address at the meeting of the British Association, 1897, referred to the possibility of Southern India being 'the cradle of the human race.'

from the lower type, and acquired characteristics putting them at no great distance in the physiological scale from the later developed Semitic and Caucasian races. As now known, they are not straight-haired like the Malays and Mongolians, but more or less curly-haired, like both of the last named. The theory that they came to India from without, passing over the north-west boundary, and through Scinde, does not rest on sufficient evidence. If the Dravidians moved into India at all, it may be more reasonably conjectured that they came from the south or the east.

“About 2,000 or 3,000 years B.C., perhaps at the beginning of what has been styled the Kaliyog, or 3101 B.C., the Sanscrit-speaking Aryans came into India from their original home at the sources of the Oxus in the neighbourhood of Bokhara, where they had resided till the period when the Iranic branch of the tribe went to the south-east. The Indic branch of the Aryans advanced down the basins of the Indus and the Ganges to the estuary of both rivers; and then proceeded by different routes into the lower and middle range of the Himālaya, up the valley of Assam, down the Coast of the Bay of Bengal as far as Chicacole in the Ganjām district, across the rivers Nerbudda and Mahanuddy into Central India, and along the West Coast as far south as Goa. Another portion of the same branch went by sea to Ceylon, and laid the foundation of the Singhalese civilization.”

Adopting a novel classification, Dr. Maclean, in assuming that there are no living representatives in Southern India of any race of a wholly pre-Dravidian character, sub-divides the Dravidians into pre-Tamulian and Tamulian, to designate two branches of the same family, one older or less civilised than the other.

Bishop Caldwell¹⁶, in summing up the question whether the forest tribes, the lower castes, and the so-called “outcasts” which speak the Dravidian languages, are of the same origin and of the same race as the Dravidians of the higher castes, expresses his opinion that the supposition that the lower castes in the Dravidian provinces belong to a different race from the higher, appears to him untenable. “It seems,” he says, “safer to hold that all the indigenous tribes, who were found by the Aryans in Southern India, belonged substantially to one and the same race. It is probable enough that the Dravidians were broken up into tribes before the Aryan

¹⁶ ‘Comparative Grammar of the Dravidian Languages.’

immigration, and that the distinctions, not only of richer and poorer, but also of master and slave, had already come into existence among them. Those distinctions may have formed the foundation of the caste system, which their Brahmanical civilisers built up, and which was moulded by degrees into an exact counterpart of the caste system of Northern India."

In his 'Original Inhabitants of Bharatavarsha or India,' Dr. G. Oppert contends that the names of many Dravidian tribes are derived from the Dravidian roots 'mal' and 'ku' both meaning a mountain. He thus traces an ultimate philological identity between the names of tribes and castes scattered throughout India, such as the Málas, Malayális, and Maravars; the Kois, Khonds, Gonds, Koravas, Kurumbas, Kodagus; and very many others. The relation of the existing hill and jungle tribes to the inhabitants of the plains is discussed in the 'Transactions of the Ethnological Society'¹⁷ by Mr. J. Crawfurd, who there challenges the theory which supposes the rude mountaineers to be the sole 'aborigines' of India, while it imagines the civilised inhabitants to be intrusive strangers, who, in a remote antiquity, invaded India, conquered it, and settled in it under the imposed names of Aryans for Northern and Turanian for Southern India. "To suppose," Mr. Crawfurd writes, "so great and fertile a region of the earth, and one consequently so favourable to the promotion of an early civilisation, to have been, within the historical period, destitute of any other original inhabitants than the few rude tribes now confined to its least favourable localities, until it came to be peopled by immigrant strangers from remote countries, is contrary to what is known to be the case, in all other portions of the globe. For my own part, I am satisfied that both the mountaineers and the inhabitants of the open plains and valleys are alike Natives of the soil and of the same race, allowance being made for such varieties of type as are found to exist in other large regions of the earth. . . . It is an opinion very generally entertained by Indian ethnologists that the races which they suppose to be the aborigines of India partake of a Negro character, in contradistinction to the civilised people of the low-lands; but this is a notion, for which I am satisfied there is no ground whatever. Throughout the continent of India no Negro or Negroid race has

¹⁷ Vol. VI, 1868—The supposed Aborigines of India as distinguished from its Civilised Inhabitants.

ever been found to exist. Wherever Negritos or Negroid races exist, their presence is unmistakably pronounced, as in the case of the Andaman Islands."

In an article entitled, "Caste and Colour" Mr. C. Johnston (Calcutta Review, 1895) divides the people of India on a simple colour basis into four or five principal types, with a series of intermediate types gradually melting into each other. These principal types are—

1. Fair, almost white. Brāhman.
2. Red. Rājput.
3. Yellow. Purest examples, the Kocch and Santāli in lower Bengal, and the Sâvara in Madras.
4. Black, or nearly black. Dravidian.

"We must," Mr. Johnston says, "content ourselves for the present with saying that it seems fairly certain that there is a great ethnical family in Southern India, distinguished primarily by black or almost black skin; that this ethnical family cannot number less than a hundred million individuals; and that this great ethnical family is not related to any other ethnical family in Asia, but is isolated and distinct; so that we must seek for the ethnical kindred of the black Dravidian, if such kindred exist, outside Asia altogether, in some direction at present undermined. . . . It has for a long time been conceded that the fourth caste of the Brāhmanical polity was drawn from this black race."
